



*Innovative Power for your Visions.*



Industrial



Railway



Medical



Defense

## DC/DC Converters AC/DC Power Supplies

Product Portfolio

## World Headquarters

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FAX:+886-4-2359-1337  
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## U.S.A Subsidiary

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717 Brea Canyon Road, Suite#1 Walnut, CA 91789  
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P-DUKE



YouTube



LinkedIn



Wechat



DigiKey

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## COMPANY PROFILE

### Expanding Your Vision Leading Your Future

P-DUKE is a Taiwan based company founded in 1992, that is fully committed to research & development and the production of high-performance power conversion products. P-DUKE offers a broad range of DC/DC converters, AC/DC power supplies as well as custom power conversion solutions. With the main focus on both railway and medical markets, where the highest product quality and compliance to all relative application standards is required, P-DUKE 's main business is in Europe, America and Asia Pacific.

### Powering The World The Innovator of Power Solutions

Accumulating over 30 years experience in the power conversion field has allowed P-DUKE to become the leading manufacturer in the low-power conversion market. The company has a strong technical team that provides prompt and professional support in power relevant system design issues which are, for example, choosing optimal power solutions or suggestions for EMI circuits, etc.

#### Subsidiary Company California, USA



#### World Headquarters Taichung, Taiwan

|                |                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------|
| Capital:       | US\$ 25,000,000                                                                                 |
| Employee:      | 290                                                                                             |
| Main Business: | AC/DC Power Supplies<br>DC/DC Converters<br>Customized Solutions<br>*Modifications & Extensions |



#### Wuxi, China

|           |                                                   |
|-----------|---------------------------------------------------|
| Area:     | 40,000 square meters                              |
| Capacity: | 530k pcs transformers/M<br>1,200k pcs inductors/M |
| Employee: | 280                                               |



**1992**

POWER MATE Technology Co., Ltd. was founded



**2005**

Investigation and developing customized products for railway applications

**2010**

Developing and launch new standard ruggedized products dedicated for railway applications



**2012**

Developing and launch new state of the art AC/DC and DC/DC standard products dedicated for medical applications



**2016**

Company name was changed to P-DUKE Technology Co., Ltd.



**2024**

The new building is expect to finish construction in Q4.

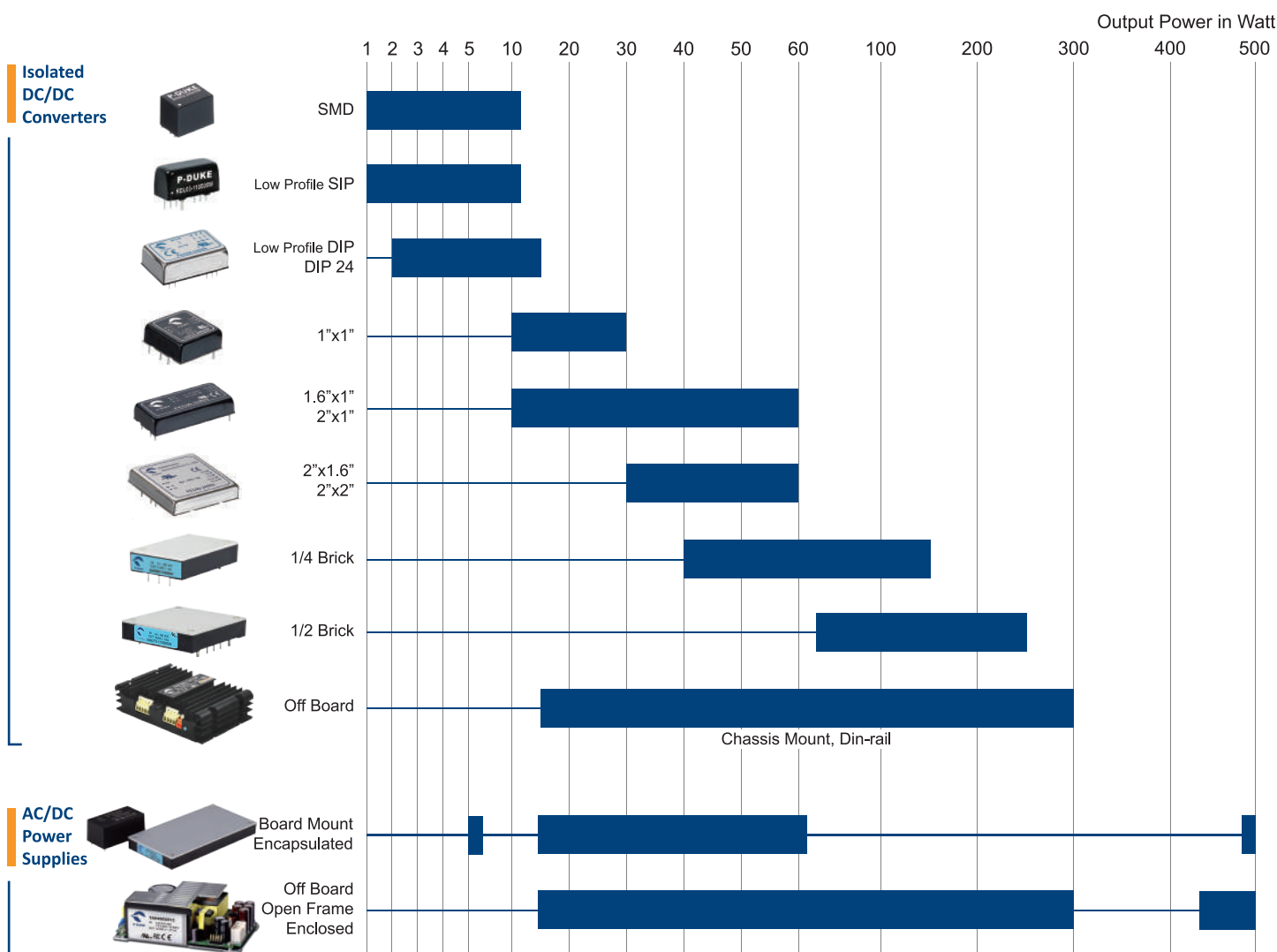
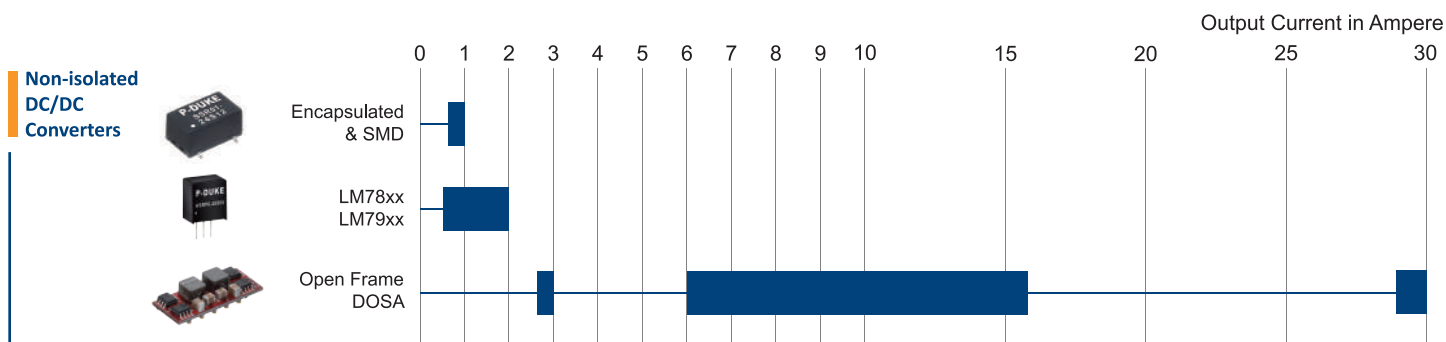
### Various Applications in the High-tech Industry Exploring any Possibilities in each Application Field

We are experts in reliable and highly efficient power converter solutions with best thermal management. We continuously explore the possibilities and opportunities to cooperate with our valued customers. Providing the best power converter solutions to our customer's applications with years of experiences and know-how. We always view our customer's requirements and our product quality as our first priority. To fulfil the requirements of any application, we have certified our products to the latest international safety and EMI/EMC standards and their relevant approvals.



ISO 9001  
ISO 13485  
ISO 14001  
ISO 45001





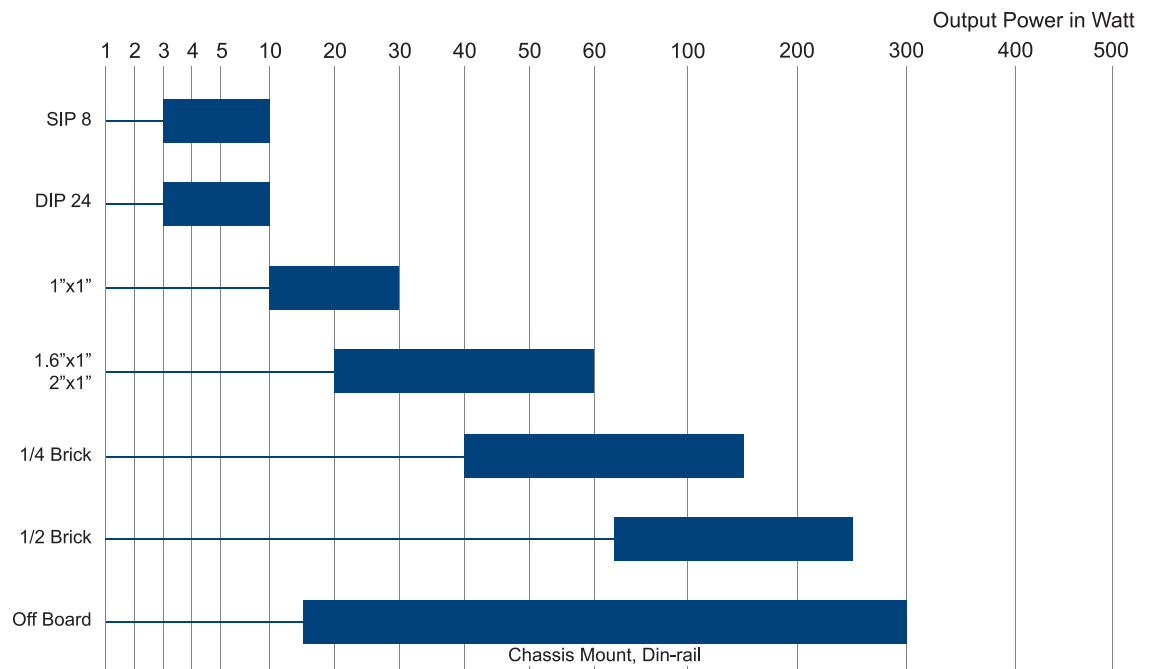
\*JST, Molex, and screw terminal block are available for AC/DC, please see datasheet for further information.

# RAILWAY



IEC 62368-1 | EN 50155 : 2017 | EN 45545-2 | EN 61373

## Isolated DC/DC Converters

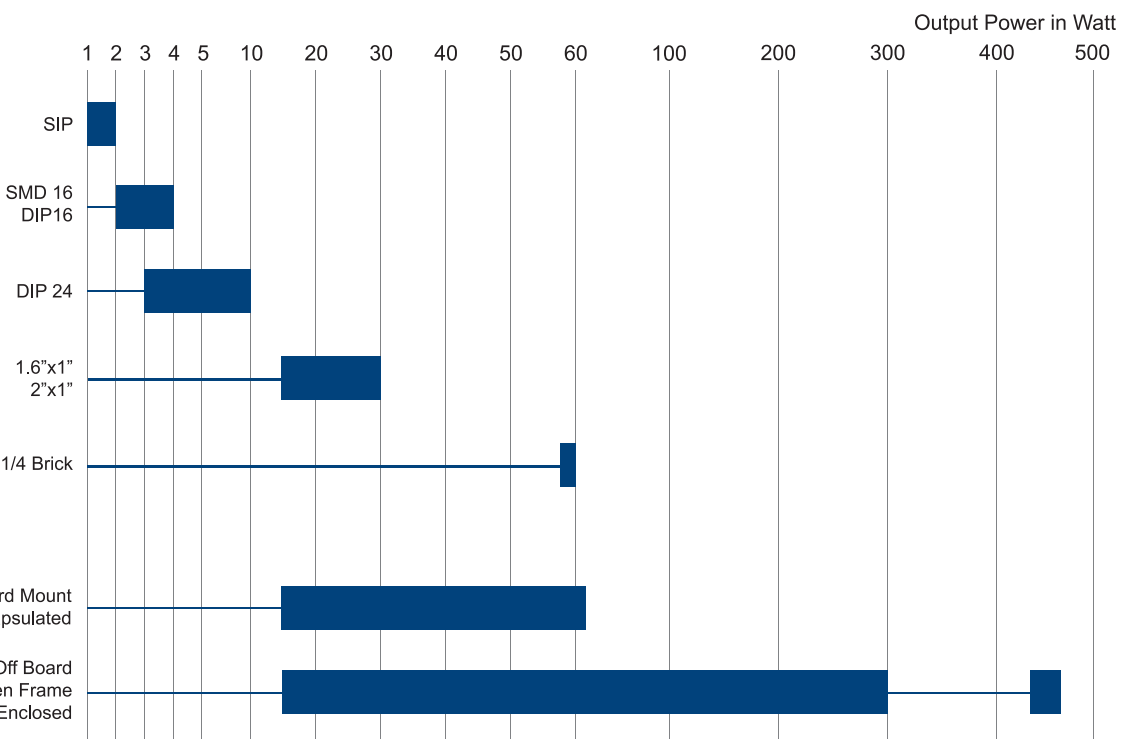


# MEDICAL



IEC 62368-1 | IEC 60601-1 Edition 3.1 | IEC 60601-1-2 4th Edition | ISO 13485 | ISO 14971

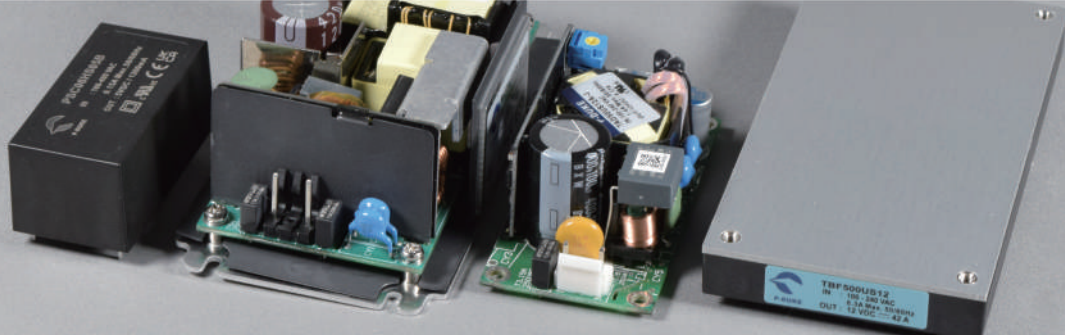
## Isolated DC/DC Converters



## AC/DC Power Supplies

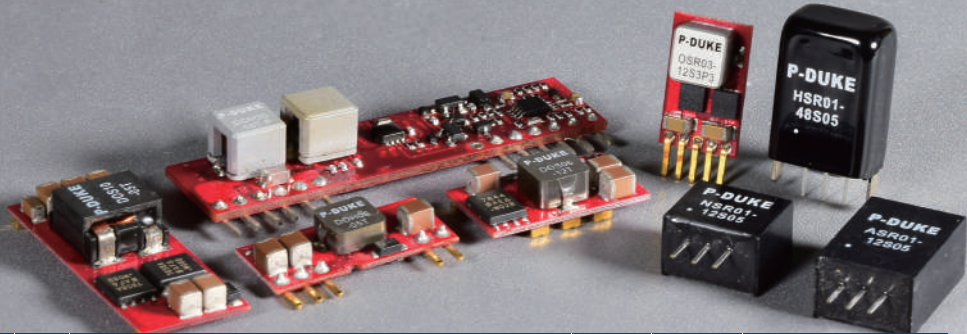


\*JST, Molex, and screw terminal block are available for AC/DC, please see datasheet for further information.



| Series       | Open Frame | Enclosed | Encapsulated | Pin Connection Type | Output Power (W) |      | Input Voltage (VAC) | Single Output | Dual Output | Triple Output | Output Voltage |          |          |          |         |         |         |         |         |         |         |         | Eff. (%) | OCV III | Isolation Voltage (VAC) | Dimensions (Inch) |   |   |
|--------------|------------|----------|--------------|---------------------|------------------|------|---------------------|---------------|-------------|---------------|----------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|-------------------------|-------------------|---|---|
|              |            |          |              |                     | Con.             | Peak |                     |               |             |               | 3.3 Vout       | 5.0 Vout | 7.5 Vout | 9.0 Vout | 12 Vout | 15 Vout | 18 Vout | 24 Vout | 28 Vout | 36 Vout | 48 Vout | 53 Vout |          |         |                         | 54 Vout           | L | W |
| PSC06        |            | ●        | ●            |                     | 6                |      | 85 – 530            | ●             |             |               | ●              |          | ●        | ●        |         | ●       |         |         | 75      | ●       | 4000    | 2.07    | 1.08     | 0.91    |                         |                   |   |   |
| TSC15        |            | ●        | ●            |                     | 15               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 89      |         |         | 2.82    | 1.14     | 0.82    |                         |                   |   |   |
| TSD30        |            | ●        | ●            |                     | 30               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 91.5    |         |         | 3.95    | 1.50     | 1.00    |                         |                   |   |   |
| TSD30-P      |            | ●        | ●            |                     | 30               | 40   |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 91.5    |         |         | 3.95    | 1.50     | 1.00    |                         |                   |   |   |
| TSD40        |            | ●        | ●            |                     | 40               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93      | ●       |         | 4.30    | 2.20     | 1.20    |                         |                   |   |   |
| TSD65        |            | ●        | ●            |                     | 65               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93.5    | ●       |         | 4.30    | 2.20     | 1.20    |                         |                   |   |   |
| TAC15        | ●          |          |              |                     | 15               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 89      |         |         | 2.61    | 1.00     | 0.62    |                         |                   |   |   |
| TAD30        | ●          |          |              |                     | 30               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 91.5    |         |         | 3.34    | 1.36     | 0.77    |                         |                   |   |   |
| TAD30-P      | ●          |          |              |                     | 30               | 40   |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 91.5    |         |         | 3.34    | 1.36     | 0.77    |                         |                   |   |   |
| TAD40 Single | ●          | ●        |              |                     | 40               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93      | ●       |         | 3.00    | 2.00     | 0.94    |                         |                   |   |   |
| TAD65 Single | ●          | ●        |              |                     | 65               |      |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93.5    | ●       |         | 3.00    | 2.00     | 0.94    |                         |                   |   |   |
| TAD65-P      | ●          | ●        |              |                     | 65               | 90   |                     | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93.5    | ●       |         | 3.00    | 2.00     | 0.94    |                         |                   |   |   |
| TAD40 Multi  | ●          | ●        |              |                     | 40               |      |                     | ●             | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 90      | ●       |         | 3.50    | 2.00     | 0.98    |                         |                   |   |   |
| TAD65 Multi  | ●          | ●        |              |                     | 65               |      |                     | ●             | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 90.5    | ●       |         | 3.50    | 2.00     | 0.98    |                         |                   |   |   |
| TAD50        | ●          |          |              |                     | 50               | 70   | ●                   |               | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 92.5    | ●       | 3.00    | 1.50    | 1.18    |          |         |                         |                   |   |   |
| TAD100       | ●          | ●        |              |                     | 100              |      | ●                   |               | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 92      | ●       | 3.00    | 2.00    | 1.16    |          |         |                         |                   |   |   |
| TAD125       | ●          | ●        |              |                     | 125              | 150  | ●                   |               | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 92      | ●       | 3.00    | 2.00    | 1.16    |          |         |                         |                   |   |   |
| TAF150       | ●          | ●        |              |                     | 150              |      | ●                   |               | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 92      | ●       | 4.00    | 2.00    | 1.16    |          |         |                         |                   |   |   |
| TAD180       | ●          | ●        |              |                     | 180              | 220  | ●                   |               | ●           | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 94      | ●       | 3.00    | 2.00    | 1.24    |          |         |                         |                   |   |   |
| TAH240       | ●          |          |              |                     | 240              | 300  | 85 – 305            | ●             |             | ●             | ●              | ●        | ●        | ●        | ●       | ●       | ●       | 91      |         | 5.00    | 3.00    | 1.32    |          |         |                         |                   |   |   |
| TAF300       | ●          | ●        |              |                     | 300              | 360  |                     | 85 – 264      | ●           |               | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93      | ●       | 4.00    | 2.09    | 1.26     |         |                         |                   |   |   |
| TAH450       | ●          | ●        |              |                     | 450              |      |                     |               | ●           |               | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 94      |         | 5.00    | 3.00    | 1.58     |         |                         |                   |   |   |
| TBF500       |            | ●        | ●            |                     | 500              |      |                     |               | ●           |               | ●              | ○        | ●        | ●        | ●       | ●       | ●       | ●       | 93      | ●       | 4.60    | 2.40    | 0.50     |         |                         |                   |   |   |
| XTBF500      | ●          | ●        |              |                     | 500              |      |                     |               | ●           |               | ●              | ●        | ●        | ●        | ●       | ●       | ●       | ●       | 93      | ●       | 7.20    | 4.30    | 1.65     |         |                         |                   |   |   |

NON-ISOLATED  
DC/DC  
CONVERTERS



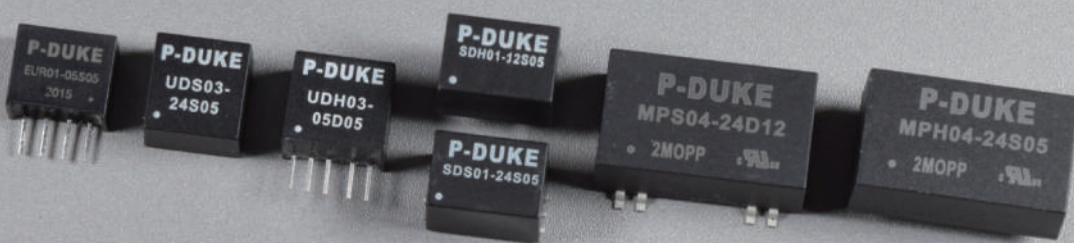
| Series  | Open Frame<br>Encapsulated<br>SMD Type<br>Thru-hole Type | Output<br>Current<br>(A) | Input<br>Voltage<br>(VDC) | Negative Vout<br>Available | Output Voltage  |               |          |          |          |          |          |          |          |          |          |           |         |         |         |      | Eff.<br>(%) | Isolation<br>Voltage | Dimensions (Inch) |   |  |
|---------|----------------------------------------------------------|--------------------------|---------------------------|----------------------------|-----------------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|---------|---------|---------|------|-------------|----------------------|-------------------|---|--|
|         |                                                          |                          |                           |                            | 1.2 Vout        | 1.5 Vout      | 1.8 Vout | 2.5 Vout | 3.0 Vout | 3.3 Vout | 5.0 Vout | 5.2 Vout | 6.0 Vout | 6.5 Vout | 8.0 Vout | 9.0 Vout  | 12 Vout | 15 Vout | 24 Vout | L    |             |                      | W                 | H |  |
| HSRP6   | ● ●                                                      | 0.6                      | 9 – 72                    |                            |                 |               |          |          |          | ● ●      |          |          |          | ●        |          | ● ● ● ● ● | 94      | None    | 0.47    | 0.34 | 0.53        |                      |                   |   |  |
| HSR01   | ● ●                                                      | 1                        | 9 – 72                    |                            |                 |               |          |          |          | ● ●      |          |          |          | ●        |          | ● ● ● ● ● | 93      |         | 0.48    | 0.34 | 0.69        |                      |                   |   |  |
| ASR01   | ● ●                                                      | 1                        | -7 – -32                  |                            | ○               |               |          |          |          |          |          | ○ ○      |          | ○ ○ ○ ○  |          |           | 96      |         | 0.46    | 0.30 | 0.65        |                      |                   |   |  |
| NSR01   | ● ●                                                      | 1                        | 4.6 – 36                  | ●                          | ● ● ● ● ● ● ● ● |               |          |          |          | ● ●      |          |          | ●        |          | ● ● ● ●  | 95.5      | 0.46    |         | 0.30    | 0.40 |             |                      |                   |   |  |
| PSR1.0  | ● ●                                                      | 1                        | 4.6 – 36                  |                            | ● ● ● ● ●       |               |          |          |          | ● ●      |          |          | ●        |          | ● ● ● ●  | 96        | 0.46    |         | 0.30    | 0.40 |             |                      |                   |   |  |
| LSR01   | ● ●                                                      | 1                        | 3.0 – 36                  |                            | ● ● ● ● ●       |               |          |          |          | ● ●      |          |          | ●        |          | ● ● ● ●  | 96        | 0.60    |         | 0.37    | 0.30 |             |                      |                   |   |  |
| SSR01   | ● ●                                                      | 1                        | 3.0 – 36                  | ●                          |                 |               | ●        |          |          | ● ●      |          |          |          |          | ● ● ● ●  | 95.5      | 0.60    |         | 0.37    | 0.30 |             |                      |                   |   |  |
| PSR02   | ● ●                                                      | 2                        | 3.0 – 36                  |                            | ● ● ● ● ●       |               |          |          |          | ● ●      |          |          | ●        |          | ● ● ● ●  | 96        | 0.55    |         | 0.30    | 0.40 |             |                      |                   |   |  |
| OSR03   | ● ●                                                      | 3                        | 2.5 – 30                  | ●                          | 0.59 – 15 VDC   |               |          |          |          |          |          |          |          |          |          | 95        | 0.37    |         | 0.24    | 0.61 |             |                      |                   |   |  |
| DOS/H06 | ● ● ● ●                                                  | 6                        | 2.4 – 5.5<br>8.3 – 14     |                            | 0.75 – 5.0 VDC  |               |          |          |          |          |          |          |          |          |          | 94        | 0.80    |         | 0.45    | 0.25 |             |                      |                   |   |  |
| DOS/H10 | ● ● ● ●                                                  | 10                       |                           |                            | 0.75 – 5.0 VDC  |               |          |          |          |          |          |          |          |          |          | 95        | 1.30    |         | 0.53    | 0.30 |             |                      |                   |   |  |
| DOS/H16 | ● ● ● ●                                                  | 16                       |                           |                            | 0.75 – 5.0 VDC  |               |          |          |          |          |          |          |          |          |          | 95        | 1.30    |         | 0.53    | 0.30 |             |                      |                   |   |  |
| DOS/H30 | ● ● ● ●                                                  | 30                       |                           | 4.5 – 14                   |                 | 0.8 – 5.5 VDC |          |          |          |          |          |          |          |          |          |           | 93      | 1.30    | 0.53    | 0.31 |             |                      |                   |   |  |

○ : Negative Output Voltage

DC/DC  
FRONT-END  
FILTERS

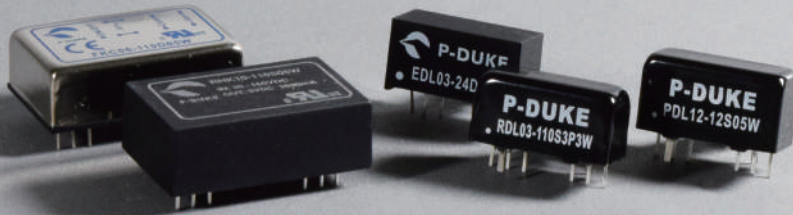


| Series         | Surge Protection<br>EMI Filter | Footprint | Output<br>Power<br>(W) | Vnom<br>(VDC) | Input<br>Voltage<br>(VDC) | Max.<br>Transient Voltage | Clamp<br>Voltage<br>(VDC) | Standard                                                               | Dimensions (Inch) |      |      |
|----------------|--------------------------------|-----------|------------------------|---------------|---------------------------|---------------------------|---------------------------|------------------------------------------------------------------------|-------------------|------|------|
|                |                                |           |                        |               |                           |                           |                           |                                                                        | L                 | W    | H    |
| SSM-110P50-001 | ●                              | DIP-24    | 20                     | 110           | 43 – 160                  | 385 V / 20 ms             | 168                       | RIA 12 Surge Susceptibility<br>NF F 01-510                             | 1.25              | 0.80 | 0.40 |
| SSM-110004-001 | ●                              | 1.6"x1"   | 150                    | 110           | 43 – 160                  |                           |                           |                                                                        | 1.60              | 1.00 | 0.40 |
| SSM-110008-001 | ●                              |           | 300                    | 110           | 43 – 160                  |                           |                           |                                                                        | 1.60              | 1.00 | 0.40 |
| MCF-028        | ● ●                            | 1.6"x1"   | 45                     | 28            | 9 – 36                    | 100 V / 50 ms             | 40                        | MIL-STD 1275E<br>MIL-STD 704F<br>RTCA DO-160G Cat. A/Z<br>MIL-STD 461G | 1.60              | 1.00 | 0.40 |
|                |                                | 2"x1"     | 75                     |               |                           |                           |                           |                                                                        | 2.00              | 1.00 | 0.40 |
|                |                                | 1/4 Brick | 150                    |               |                           |                           |                           |                                                                        | 2.28              | 1.45 | 0.50 |
|                |                                | 1/4 Brick | 250                    |               |                           |                           |                           |                                                                        | 2.28              | 1.45 | 0.50 |



## SMALL SIZE & LOW PROFILE PACKAGE

| Series           | Footprint        | Output Power (W) | Input Ratio<br>12:1/ 8:1<br>4:1    2:1 | Input Voltage (VDC)                        | Single Output<br>Dual Output<br>Triple Output | Output Voltage |          |          |          |         |         |         |         |         |         |          |          |                      |      |      |      | Eff. (%) | Isolation Voltage | Dimensions (Inch) |  |  |
|------------------|------------------|------------------|----------------------------------------|--------------------------------------------|-----------------------------------------------|----------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|----------|----------|----------------------|------|------|------|----------|-------------------|-------------------|--|--|
|                  |                  |                  |                                        |                                            |                                               | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout | 24 Vout | 48 Vout | 53 Vout | ±5 Vout | ±12 Vout | ±15 Vout | ±24 Vout             | L    | W    | H    |          |                   |                   |  |  |
| EUR01            | SIP-4            | 1                |                                        | 3.3, 5, 12, 15, 24                         | ●                                             | ● ● ● ● ● ●    |          |          |          |         |         |         |         |         |         |          | 81       | 3000 VDC<br>1600 VDC | 0.45 | 0.24 | 0.39 |          |                   |                   |  |  |
| DU1P0            | SIP-7            | 1                |                                        | 5, 12, 15, 24                              | ● ●                                           | ●              |          |          | ● ●      |         |         |         |         |         |         | ● ● ●    | 82       | 3000 VDC<br>1000 VDC | 0.77 | 0.24 | 0.40 |          |                   |                   |  |  |
| UDS01<br>UDH01   | SMD-7<br>SIP-5   | 1                | ●                                      | 4.5 – 13.2                                 | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 83       | 1600 VDC             | 0.47 | 0.44 | 0.31 |          |                   |                   |  |  |
| UDS02<br>UDH02   |                  | 2                | ●                                      | 9 – 18<br>18 – 36                          | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 84       |                      |      |      |      |          |                   |                   |  |  |
| UDS03<br>UDH03   |                  | 3                | ●                                      | 36 – 75                                    | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 84       |                      |      |      |      |          |                   |                   |  |  |
| SDS01<br>SDH01   | SMD-8<br>DIP-8   | 1                | ●                                      | 4.5 – 9<br>9 – 18                          | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 83       | 3000 VDC<br>1600 VDC | 0.52 | 0.36 | 0.40 |          |                   |                   |  |  |
| SDS02<br>SDH02   |                  | 2                | ●                                      | 18 – 36<br>36 – 75                         | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 86       |                      |      |      |      |          |                   |                   |  |  |
| SDS05<br>SDH05   |                  | 5                | ●                                      | 4.5 – 13.2<br>9 – 18<br>18 – 36<br>36 – 75 | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 86       |                      |      |      |      |          |                   |                   |  |  |
| SDS01W<br>SDH01W |                  | 1                | ●                                      | 4.5 – 18<br>9 – 36<br>18 – 75              | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 81       |                      |      |      |      |          |                   |                   |  |  |
| SDS02W<br>SDH02W |                  | 2                | ●                                      |                                            | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 84       |                      |      |      |      |          |                   |                   |  |  |
| SDS03W<br>SDH03W |                  | 3                | ●                                      |                                            | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 84       |                      |      |      |      |          |                   |                   |  |  |
| SDS05W<br>SDH05W |                  | 5                | ●                                      |                                            | 9 – 36<br>18 – 75                             | ● ●            | ● ●      |          |          | ● ● ● ● |         |         |         |         |         | ● ● ●    | 84       |                      |      |      |      |          |                   |                   |  |  |
| PDS02<br>PDH02   | SMD-14<br>DIP-14 | 2                | ●                                      | 4.5 – 9<br>9 – 18                          | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         |         | ● ● ●    | 84       | 3000 VDC<br>1600 VDC | 0.74 | 0.50 | 0.34 |          |                   |                   |  |  |
| PDS03<br>PDH03   |                  | 3                | ●                                      | 18 – 36<br>36 – 75                         | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         | ● ● ●   | 83       |          |                      |      |      |      |          |                   |                   |  |  |
| PDS02W<br>PDH02W |                  | 2                | ●                                      | 4.5 – 18<br>9 – 36                         | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         | ● ● ●   | 82       |          |                      |      |      |      |          |                   |                   |  |  |
| PDS03W<br>PDH03W |                  | 3                | ●                                      | 18 – 75                                    | ● ●                                           | ● ●            |          |          | ● ● ● ●  |         |         |         |         |         | ● ● ●   | 83       |          |                      |      |      |      |          |                   |                   |  |  |



|                                                                                    | Series                                                                             | Footprint | Output Power (W) | Input Ratio<br>12:1/8:1<br>4:1<br>2:1 | Input Voltage (VDC)                        | Single Output<br>Dual Output<br>Triple Output | Output Voltage |          |          |          |         |         |                      |                      |                      |                      |                    |                    |          |          | Eff. (%)           | Isolation Voltage | Dimensions (Inch) |   |  |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|------------------|---------------------------------------|--------------------------------------------|-----------------------------------------------|----------------|----------|----------|----------|---------|---------|----------------------|----------------------|----------------------|----------------------|--------------------|--------------------|----------|----------|--------------------|-------------------|-------------------|---|--|
|                                                                                    |                                                                                    |           |                  |                                       |                                            |                                               | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout | 24 Vout              | 48 Vout              | 53 Vout              | ±5 Vout              | ±12 Vout           | ±15 Vout           | ±24 Vout | L        |                    |                   | W                 | H |  |
|  | EDL02                                                                              | SIP-8     | 2                | ●                                     | 4.5 – 13.2<br>9 – 18                       | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | ● ●                  | ● ●                  | ● ●                | ● ●                | 86       | 1600 VDC | 0.86   0.36   0.44 |                   |                   |   |  |
|                                                                                    | EDL03                                                                              |           | 3                | ●                                     | 18 – 36<br>36 – 75                         | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | ● ●                  | ● ●                  | ● ●                | 86                 |          |          |                    |                   |                   |   |  |
|                                                                                    | EDL02W                                                                             |           | 2                | ●                                     | 4.5 – 18<br>9 – 36                         | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | ● ●                  | ● ●                  | 82                 |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | EDL03W                                                                             |           | 3                | ●                                     | 18 – 75                                    | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | ● ●                  | 83                   |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | LDL03                                                                              |           | 3                | ●                                     | 4.5 – 13.2<br>9 – 18<br>18 – 36<br>36 – 75 | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | ● ●                  | 85                   | 1600 VDC           |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL02                                                                              |           | 2                | ●                                     | 4.5 – 9<br>9 – 18                          | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | 84                   | 3000 VDC<br>1600 VDC |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL03                                                                              |           | 3                | ●                                     | 18 – 36                                    | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | 85                   |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL06                                                                              |           | 6                | ●                                     | 36 – 75                                    | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | 86                   |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL09                                                                              |           | 9                | ●                                     | 9 – 18<br>18 – 36<br>36 – 75               | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | 89                   | 1600 VDC             |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL03W                                                                             |           | 3                | ●                                     | 4.5 – 18<br>9 – 36<br>18 – 75              | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | 82                   | 3000 VDC<br>1600 VDC |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL06W                                                                             |           | 6                | ●                                     | 9 – 36<br>18 – 75                          | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | 88                   | 3000 VDC<br>1600 VDC |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL09W                                                                             |           | 9                | ●                                     | 18 – 75                                    | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | 89                   | 1600 VDC             |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | PDL12W                                                                             | 12        | ●                | 4.5 – 18<br>9 – 36<br>18 – 75         | ● ●                                        | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | 90                   | 1600 VDC             |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    |  | RDL03W    | 3                | ●                                     | 9 – 36<br>18 – 75<br>43 – 160              | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | 83                   | 3000 VDC             | 0.86   0.38   0.44 |                    |          |          |                    |                   |                   |   |  |
|                                                                                    |                                                                                    | RDL06W    | 6                | ●                                     |                                            | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | 88                   |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
| RDL10W                                                                             |                                                                                    | 10        | ●                | ● ●                                   |                                            | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 89      | 3000 VDC<br>2250 VDC | 0.87   0.38   0.47   |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|  |                                                                                    | FKC03     | DIP-24<br>SMD-24 | 3                                     | ●                                          | 9 – 18<br>18 – 36<br>36 – 75                  | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | ● ●                  | ● ●                  | 82                   | 1600 VDC             |                    | 1.25   0.80   0.40 |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC05                                                                              | 5         |                  | ●                                     | ● ●                                        |                                               | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 84      |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC08                                                                              | 8         |                  | ●                                     | ● ●                                        |                                               | ● ●            | ● ●      | ● ●      | ● ●      | 88      |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC12                                                                              | 12        |                  | ●                                     | ● ●                                        |                                               | ● ●            | ● ●      | ● ●      | 88       |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC15                                                                              | 15        |                  | ●                                     | ● ●                                        |                                               | ● ●            | ● ●      | 89       |          |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC05W                                                                             | 5         |                  | ●                                     | 9 – 36<br>18 – 75                          | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | 84      |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC08W                                                                             | 8         | ●                | 9 – 36<br>18 – 75<br>43 – 160         | ● ●                                        | ● ●                                           | ● ●            | ● ●      | ● ●      | 88       |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC12W                                                                             | 12        | ●                | 9 – 36<br>18 – 75                     | ● ●                                        | ● ●                                           | ● ●            | ● ●      | 88       |          |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | FKC15W                                                                             | 15        | ●                | 18 – 75                               | ● ●                                        | ● ●                                           | ● ●            | 89       |          |          |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    | LKC05W                                                                             | 5         | ●                | 4.5 – 12<br>9 – 36<br>18 – 75         | ● ●                                        | ● ●                                           | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 89      |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    |  | RHK03W    | DIP-24           | 3                                     | ●                                          | 36 – 160                                      | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●     | 85                   | 3000 VAC             |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
|                                                                                    |                                                                                    | RHK06W    |                  | 6                                     | ●                                          |                                               | ● ●            | ● ●      | ● ●      | ● ●      | 86.5    |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |
| RHK10W                                                                             |                                                                                    | 10        |                  | ●                                     | ● ●                                        |                                               | ● ●            | ● ●      | 88       |          |         |         |                      |                      |                      |                      |                    |                    |          |          |                    |                   |                   |   |  |

ISOLATED  
DC/DC  
CONVERTERS

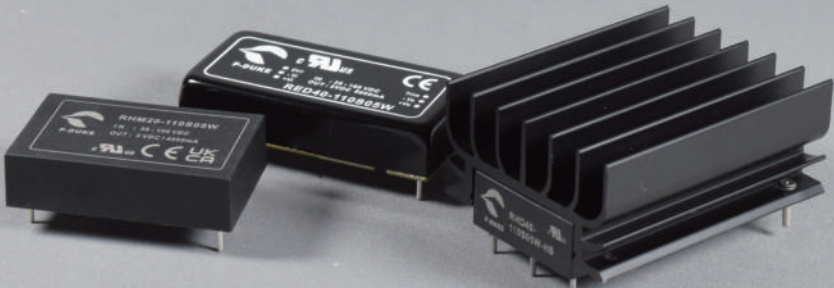


1"x1"



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Series | Footprint | Output Power (W) | Input Ratio<br>12:1 / 8:1<br>4:1<br>2:1 | Input Voltage (VDC)           | Single Output<br>Dual Output<br>Triple Output | Output Voltage |          |          |          |          |         |         |         |         |         |          |          |          | Eff. (%)             | Isolation Voltage | Dimensions (Inch) |      |          |      |      |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|------------------|-----------------------------------------|-------------------------------|-----------------------------------------------|----------------|----------|----------|----------|----------|---------|---------|---------|---------|---------|----------|----------|----------|----------------------|-------------------|-------------------|------|----------|------|------|------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |           |                  |                                         |                               |                                               | 2.5 Vout       | 3.3 Vout | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout | 24 Vout | 53 Vout | ±5 Vout | ±12 Vout | ±15 Vout | ±24 Vout |                      |                   | L                 | W    | H        |      |      |      |
| <br><br><br><br><br> | LCD10  | 1"x1"     | 10               | ●                                       | 9 – 18<br>18 – 36<br>36 – 75  | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    |          | 91       | 1600 VDC             | 1.00              | 1.00              | 0.39 |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD15  |           | 15               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD20  |           | 20               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 92       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD30  |           | 30               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 93       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD10W |           | 10               | ●                                       | 9 – 36<br>18 – 75             | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD15W |           | 15               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD20W |           | 20               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LCD30W |           | 30               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 92       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD15  |           | 15               | ●                                       | 9 – 18<br>18 – 36<br>36 – 75  | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       | 3000 VDC<br>1600 VDC |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD10W |           | 10               | ●                                       | 9 – 36<br>18 – 75<br>36 – 160 | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 90       | 3000 VDC             |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD15W |           | 15               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD20W |           | 20               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 91       | 3000 VDC<br>2250 VDC |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD30W |           | 30               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | ● ● ●    | 92       |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD10U |           | 10               | ●                                       | 9 – 75<br>14 – 160            | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | ● ● ●    | 88       | 3000 VDC |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RCD20U |           | 20               | ●                                       |                               | ● ●                                           | ● ●            |          |          |          | ● ● ●    | ● ● ●   | ● ● ●   |         | ● ● ●   | ● ● ●   | 88       |          |          |                      |                   |                   |      |          |      |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LED15  |           | 15               | ●                                       | 18 – 36<br>36 – 75            | ●                                             |                |          |          |          |          |         | ● ●     |         |         |         |          |          |          | 88                   |                   |                   |      | 2250 VDC | 1.10 | 0.94 | 0.33 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LED15W |           | 15               | ●                                       | 9 – 36<br>18 – 75             | ●                                             |                |          |          |          |          |         | ● ●     |         |         |         |          |          | 87       |                      |                   |                   |      |          |      |      |      |

ISOLATED  
DC/DC  
CONVERTERS



1.6"x1" | 2"x1" | 2"x1.6" | 2"x2"

|   | Series  | Footprint | Output Power (W) | Input Ratio |            | Input Voltage (VDC)          | Single Output                 | Dual Output | Triple Output | Output Voltage |          |          |          |          |          |         |         |         |         |         |         |          |          | Eff. (%) |          | Isolation Voltage | Dimensions (Inch) |      |      |
|---|---------|-----------|------------------|-------------|------------|------------------------------|-------------------------------|-------------|---------------|----------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|-------------------|-------------------|------|------|
|   |         |           |                  | 12:1/8:1    | 4:1<br>2:1 |                              |                               |             |               | 1.5 Vout       | 1.8 Vout | 2.5 Vout | 3.3 Vout | 5.0 Vout | 5.1 Vout | 12 Vout | 15 Vout | 24 Vout | 48 Vout | 53 Vout | ±5 Vout | ±12 Vout | ±15 Vout |          |          |                   | ±24 Vout          | L    | W    |
| 🚂 | RHM20W  | 1.6"x1"   | 20               | ●           |            | 36 – 160                     | ●                             | ●           |               |                |          |          |          | ●        | ●        | ●       | ●       | ●       |         |         |         | ●        | ●        | ●        | 90.5     | 3000 VAC          | 1.60              | 1.00 | 0.40 |
|   | FDC10   | 2"x1"     | 10               |             | ●          | 9 – 18<br>18 – 36<br>36 – 75 | ●                             | ●           |               |                |          |          |          | ●        | ●        |         | ●       | ●       |         |         |         | ●        | ●        | ●        | 87       | 1600 VDC          | 2.00              | 1.00 | 0.40 |
|   | FEC15   |           | 15               |             | ●          |                              | ●                             | ●           |               |                |          |          | ●        | ●        |          |         | ●       | ●       | ●       |         |         |          |          |          | 88       |                   |                   |      |      |
|   | FED20   |           | 20               |             | ●          |                              | ●                             | ●           |               | ●              | ●        | ●        | ●        | ●        |          |         | ●       | ●       | ●       |         |         |          |          |          | 89       |                   |                   |      |      |
|   | FED30   |           | 30               |             | ●          |                              | ●                             | ●           |               | ●              |          | ●        | ●        | ●        | ●        |         |         | ●       | ●       | ●       |         |          |          |          | 91       |                   |                   |      |      |
|   | EED40   |           | 40               |             | ●          |                              | ●                             | ●           |               |                |          | ●        | ●        |          | ●        | ●       | ●       |         |         | ●       | ●       | ●        |          |          | 93       |                   |                   |      |      |
|   | FED60   |           | 60               |             | ●          |                              | ●                             | ●           |               |                |          | ●        | ●        |          | ●        | ●       | ●       |         |         | ●       | ●       | ●        |          |          | 92       |                   |                   |      |      |
|   | FDC10W  |           | 10               |             | ●          | 9 – 36<br>18 – 75            | ●                             | ●           |               |                |          |          |          | ●        | ●        |         |         | ●       | ●       | ●       |         |          |          |          | 84       |                   |                   |      |      |
|   | FEC15W  |           | 15               |             | ●          |                              | ●                             | ●           | ●             | ●              | ●        | ●        | ●        |          |          |         | ●       | ●       | ●       |         |         |          |          |          | 88       |                   |                   |      |      |
|   | FED20W  |           | 20               |             | ●          |                              | ●                             | ●           | ●             |                | ●        | ●        |          |          |          |         | ●       | ●       | ●       |         |         |          |          |          | 89       |                   |                   |      |      |
|   | FED30W  |           | 30               |             | ●          |                              | ●                             | ●           |               | ●              |          | ●        | ●        | ●        | ●        | ●       |         |         | ●       | ●       | ●       |          |          |          | 91       |                   |                   |      |      |
|   | FED30TW |           | 30               |             | ●          |                              |                               | ●           |               |                |          | ●        | ●        |          |          |         |         |         | ●       | ●       |         |          |          |          | 88       |                   |                   |      |      |
|   | EED40W  |           | 40               |             | ●          |                              | ●                             | ●           |               |                |          | ●        | ●        |          | ●        | ●       | ●       |         |         | ●       | ●       | ●        |          |          | 93       |                   |                   |      |      |
|   | FED60W  |           | 60               |             | ●          |                              | ●                             | ●           |               |                |          | ●        | ●        |          | ●        | ●       | ●       |         |         | ●       | ●       | ●        |          |          | 92       |                   |                   |      |      |
| 🚂 | RED20W  |           |                  | 20          |            | ●                            | 9 – 36<br>18 – 75<br>43 – 160 | ●           | ●             |                |          |          |          | ●        | ●        |         | ●       | ●       |         |         |         | ●        | ●        |          | 89       |                   |                   |      |      |
| 🚂 | RED40W  |           | 40               |             | ●          | 9 – 36<br>18 – 75            | ●                             | ●           |               |                |          |          | ●        | ●        |          | ●       | ●       | ●       | ●       | ●       | ●       | ●        | ●        | 93       | 3000 VDC |                   |                   |      |      |
| 🚂 | RED60W  |           | 60               |             | ●          | 36 – 160                     | ●                             | ●           |               |                |          |          | ●        | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●        | ●        | 94       |          |                   |                   |      |      |
| 🚂 | RHD40W  |           | 40               |             | ●          | 36 – 160                     | ●                             | ●           |               |                |          |          | ●        | ●        | ●        | ●       | ●       |         |         |         | ●       | ●        |          | 90       | 3000 VAC |                   |                   |      |      |
| 🚂 | RED40U  |           | 40               | ●           |            | 9 – 75<br>14 – 160           | ●                             | ●           |               |                |          |          | ●        | ●        | ●        | ●       | ●       |         |         |         | ●       | ●        |          | 90       | 3000 VDC |                   |                   |      |      |
|   | FEC30   | 2"x1.6"   | 30               |             | ●          | 9 – 18<br>18 – 36<br>36 – 75 | ●                             | ●           |               | ●              | ●        | ●        | ●        | ●        |          | ●       | ●       |         |         |         |         | ●        | ●        | 90       | 1600 VDC | 2.00              | 1.60              | 0.40 |      |
|   | FEC30W  |           | 30               |             | ●          | 10 – 40<br>18 – 75           | ●                             | ●           |               | ●              | ●        | ●        | ●        | ●        |          |         | ●       | ●       |         |         |         |          |          | 88       |          |                   |                   |      |      |
|   | FEC40   | 2"x2"     | 40               |             | ●          | 9 – 18<br>18 – 36<br>36 – 75 | ●                             | ●           | ●             | ●              | ●        | ●        | ●        | ●        |          |         | ●       | ●       |         |         |         |          |          | 90       |          | 2.00              | 2.00              | 0.40 |      |
|   | FEC40W  |           | 40               |             | ●          | 9 – 36<br>18 – 75            | ●                             | ●           |               |                |          | ●        | ●        |          |          |         |         | ●       | ●       |         |         |          |          | 89       |          |                   |                   |      |      |
|   | FEC60   |           | 60               |             | ●          | 18 – 36<br>36 – 75           | ●                             |             |               |                |          | ●        | ●        |          |          | ●       | ●       |         |         |         |         |          |          | 91       |          |                   |                   |      |      |



|                                                                                   | Series  | Footprint | Output Power (W) | Input Ratio |     |                                   | Input Voltage (VDC) | Single Output | Dual Output | Triple Output | Output Voltage |          |          |         |         |         |         |         |         |         |         |          | Eff. (%)             | Isolation Voltage | Dimensions (Inch) |          |                      |   |   |
|-----------------------------------------------------------------------------------|---------|-----------|------------------|-------------|-----|-----------------------------------|---------------------|---------------|-------------|---------------|----------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------------------|-------------------|-------------------|----------|----------------------|---|---|
|                                                                                   |         |           |                  | 12:1/8:1    | 4:1 | 2:1                               |                     |               |             |               | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 12 Vout | 15 Vout | 24 Vout | 28 Vout | 30 Vout | 48 Vout | 53 Vout | ±5 Vout | ±12 Vout |                      |                   | ±15 Vout          | ±24 Vout | L                    | W | H |
|    | QAE40U  | 1/4 Brick | 40               | ●           |     | 9 – 75<br>14 – 160                | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       |         |         | 91       | 3000 VAC<br>2250 VDC | 2.28              | 1.45              | 0.50     |                      |   |   |
|    | QAE60U  |           | 60               | ●           |     |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          |                      |                   |                   |          | 91                   |   |   |
|    | QAE100U |           | 100              | ●           |     |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          |                      |                   |                   |          | 90                   |   |   |
|                                                                                   | QAE100  |           | 108              |             | ●   | 8.5 – 22<br>16.5 – 36             | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 93                   |                   |                   |          | 2250 VDC             |   |   |
|                                                                                   | QAE150  |           | 150              |             | ●   |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 92                   |                   |                   |          |                      |   |   |
|    | QAE100W |           | 90               |             | ●   | 8.5 – 36<br>16.5 – 75             | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 90                   |                   |                   |          | 3000 VAC<br>2250 VDC |   |   |
|    | QAE150W |           | 132              |             | ●   | 40 – 160                          | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 90                   |                   |                   |          |                      |   |   |
|                                                                                   | HAE100  | 1/2 Brick | 100              |             | ●   | 9 – 18<br>18 – 36<br>36 – 75      | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       |         |         | 93       | 3000 VDC             | 2.40              | 2.28              | 0.50     |                      |   |   |
|                                                                                   | HAE150  |           | 196              |             | ●   | 8.5 – 22<br>16.5 – 36             | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          |                      |                   |                   |          | 93                   |   |   |
|                                                                                   | HAE200  |           | 255              |             | ●   | 33 – 75                           | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          |                      |                   |                   |          | 93                   |   |   |
|  | HAE75W  |           | 75               |             | ●   | 9 – 36<br>18 – 75<br>43 – 160     | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 91                   |                   |                   |          | 3000 VAC<br>3000 VDC |   |   |
|  | HAE100W |           | 100              |             | ●   | 8.5 – 36<br>16.5 – 75<br>43 – 160 | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 93                   |                   |                   |          |                      |   |   |
|  | HAE150W |           | 182              |             | ●   |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 91                   |                   |                   |          |                      |   |   |
|  | HAE200W |           | 240              |             | ●   |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 91                   |                   |                   |          |                      |   |   |
|  | HAE150U |           | 150              |             | ●   | 16 – 160                          | ●                   |               |             |               | ●              | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 93                   |                   |                   |          | 3000 VAC             |   |   |
|  | HAE200U |           | 200              |             | ●   |                                   | ●                   |               |             |               |                | ●        | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       |         |          | 93                   |                   |                   |          |                      |   |   |



|                                                                                    | Series               | Footprint            | Output Power (W) | Input Ratio         |                               |                                   | Input Voltage (VDC) | Single Output                 | Dual Output | Triple Output | Output Voltage |          |          |         |          |          |         |         |          |                      |          |          |          | Eff. (%) | Isolation Voltage | Dimensions (Inch)    |      |      |
|------------------------------------------------------------------------------------|----------------------|----------------------|------------------|---------------------|-------------------------------|-----------------------------------|---------------------|-------------------------------|-------------|---------------|----------------|----------|----------|---------|----------|----------|---------|---------|----------|----------------------|----------|----------|----------|----------|-------------------|----------------------|------|------|
|                                                                                    |                      |                      |                  | 12:1/ 8:1           | 4:1                           | 2:1                               |                     |                               |             |               | 3:3 Vout       | 5:0 Vout | 5:1 Vout | 12 Vout | 15 Vout  | 24 Vout  | 28 Vout | 30 Vout | 48 Vout  | 53 Vout              | ±5 Vout  | ±12 Vout | ±15 Vout |          |                   | ±24 Vout             | L    | W    |
|  | UFED20               | *Chassis<br>Din-rail | 20               |                     | ●                             | 9.5 – 18<br>18 – 36<br>36 – 75    | ●                   | ●                             |             | ●             | ●              |          | ●        | ●       |          |          |         |         | ●        | ●                    | 88       | 1600 VDC | 4.00     | 2.25     | 0.75              |                      |      |      |
|                                                                                    | UFEC30               |                      | 30               |                     | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        |          |         |          | ●        | ●       | 89      |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFEC40               |                      | 40               |                     | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              |          |          |         | ●        | ●        | 89      |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFEC60               |                      | 60               |                     | ●                             | 18 – 36<br>36 – 75                | ●                   | ●                             | ●           | ●             | ●              |          |          |         |          |          | 89      |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFEC15W              |                      | 15               | ●                   | 9.5 – 36<br>18 – 75           | ●                                 | ●                   | ●                             | ●           | ●             | ●              |          |          |         | ●        | ●        | ●       | 87      |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFED20W              |                      | 20               | ●                   |                               | ●                                 | ●                   | ●                             | ●           | ●             | ●              | ●        | 88       |         |          |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | URED20W              |                      |                  | 20                  | ●                             | 9 – 36<br>18 – 75<br>43 – 160     | ●                   | ●                             | ●           | ●             | ●              |          |          |         |          | ●        | ●       | 88      | 2250 VDC |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFEC30W              |                      |                  | 30                  | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | ●       | 87       | 1600 VDC |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFED40W              |                      |                  | 40                  | ●                             | 9.5 – 36<br>18 – 75<br>43 – 160   | ●                   | ●                             | ●           | ●             | ●              | ●        |          |         |          | ●        | ●       | ●       | 91       | 3000 VDC<br>1600 VDC |          |          |          |          |                   |                      |      |      |
|                                                                                    | UFEC40W              |                      |                  | 40                  | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | 88      | 1600 VDC |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|  | HAE100-T             | *Chassis             | 100              |                     | ●                             | 9 – 18<br>18 – 36<br>36 – 75      | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | ●       |          |          |         |         |          | 93                   | 3000 VDC | 3.35     | 2.40     | 1.59     |                   |                      |      |      |
|                                                                                    | HAE150-T             |                      | 196              |                     | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | ●       | 93       |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | HAE200-T             |                      | 255              |                     | ●                             |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | 93      |          |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | HAE75W-T             |                      | 75               | ●                   | 9 – 36<br>18 – 75<br>43 – 160 | ●                                 | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        |         |          |          |         |         | 91       | 3000 VAC<br>3000 VDC |          |          |          |          |                   |                      |      |      |
|                                                                                    | HAE100W-T            |                      | 100              | ●                   |                               | 8.5 – 36<br>16.5 – 75<br>43 – 160 | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | ●       |          |          |         |         |          |                      | 93       |          |          |          |                   |                      |      |      |
|                                                                                    | HAE150W-T            |                      | 182              | ●                   |                               |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | ●        | 91      |          |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | HAE200W-T            |                      | 240              | ●                   |                               |                                   | ●                   | ●                             | ●           | ●             | ●              | ●        | 91       |         |          |          |         |         |          |                      |          |          |          |          |                   |                      |      |      |
|                                                                                    | WAF150W              |                      | *Chassis         | 150                 |                               |                                   | ●                   | 9 – 36<br>18 – 75<br>43 – 160 | ●           | ●             | ●              | ●        | ●        | ●       | ●        |          |         |         |          |                      |          |          |          |          | 89                | 3000 VDC<br>2250 VDC | 3.86 | 2.56 |
| WAF300W                                                                            | *Chassis<br>Din-rail | 300                  | ●                | 18 – 75<br>43 – 160 | ●                             | ●                                 | ●                   |                               | ●           | ●             | ●              | ●        |          |         |          |          |         | 92      | 3000 VAC | 6.00                 | 4.00     | 1.52     |          |          |                   |                      |      |      |

\*Chassis: Chassis mount



| Series  | Footprint | Output Power (W) | Input Ratio |                               |     | Input Voltage (VDC) | Single Output | Dual Output | Output Voltage |          |          |          |         |          |          |                      |          |         |          |          |          |                      |          |      | Eff. (%) | Isolation Voltage | Dimensions (Inch) |   |  |
|---------|-----------|------------------|-------------|-------------------------------|-----|---------------------|---------------|-------------|----------------|----------|----------|----------|---------|----------|----------|----------------------|----------|---------|----------|----------|----------|----------------------|----------|------|----------|-------------------|-------------------|---|--|
|         |           |                  | 12:1/ 8:1   | 4:1                           | 2:1 |                     |               |             | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout  | 24 Vout  | 28 Vout              | 30 Vout  | 48 Vout | 53 Vout  | ±5 Vout  | ±12 Vout | ±15 Vout             | ±24 Vout | L    |          |                   | W                 | H |  |
| RDL03W  | SIP-8     | 3                | ●           | 9 – 36<br>18 – 75<br>43 – 160 | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | ● ●     | ● ●      | 83       | 3000 VDC | 0.86                 | 0.36     | 0.44 |          |                   |                   |   |  |
| RDL06W  |           | 6                | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | ● ●     | ● ●      | 87       |          | 0.87                 | 0.38     | 0.47 |          |                   |                   |   |  |
| RDL10W  |           | 10               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | ● ●     | ● ●      | 89       |          | 3000 VDC<br>2250 VDC | 0.87     | 0.38 | 0.47     |                   |                   |   |  |
| FKC08W  | DIP-24    | 8                | ●           | 36 – 160                      | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | ● ●     | 88a      | 1600 VDC | 1.25     | 0.80                 | 0.40     |      |          |                   |                   |   |  |
| RHK03W  |           | 3                | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | 85      | 3000 VAC |          |          |                      |          |      |          |                   |                   |   |  |
| RHK06W  |           | 6                | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | 86.5     |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RHK10W  |           | 10               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | 88                   |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RCD10W  | 1"x1"     | 10               | ●           | 9 – 36<br>18 – 75<br>36 – 160 | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | ● ●                  | ● ●      | 90      | 3000 VDC | 1.00     | 1.00     | 0.39                 |          |      |          |                   |                   |   |  |
| RCD15W  |           | 15               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | 91       | 3000 VDC<br>2250 VDC |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RCD20W  |           | 20               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 91       |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RCD30W  |           | 30               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 92       |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RCD10U  |           | 10               | ●           | 9 – 75<br>14 – 160            | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 88       | 3000 VDC |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RCD20U  |           | 20               | ●           |                               | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | 88      |          |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RHM20W  | 1.6"x1"   | 20               | ●           | 36 – 160                      | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | 90.5                 | 3000 VAC | 1.60    | 1.00     | 0.40     |          |                      |          |      |          |                   |                   |   |  |
| RED20W  | 2"x1"     | 20               | ●           | 9 – 36<br>18 – 75<br>43 – 160 | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | ● ●      | ● ●      | 89                   | 2250 VDC | 2.00    | 1.00     | 0.40     |          |                      |          |      |          |                   |                   |   |  |
| RED40W  |           | 40               | ●           | 9 – 36<br>18 – 75             | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | ● ●     | 93       | 3000 VDC |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RED60W  |           | 60               | ●           | 36 – 160                      | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | 94      | 3000 VDC |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RHD40W  |           | 40               | ●           | 36 – 160                      | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | 90      | 3000 VAC |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| RED40U  |           | 40               | ●           | 9 – 75<br>14 – 160            | ● ● | ● ●                 | ● ●           | ● ●         | ● ●            | ● ●      | ● ●      | ● ●      | 90      | 3000 VDC |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| QAE40U  | 1/4 Brick | 40               | ●           | 9 – 75<br>14 – 160            | ●   | ●                   | ●             | ●           | ●              | ●        | ●        | ●        | ●       | ●        | 91       | 3000 VAC<br>2250 VDC | 2.28     | 1.45    | 0.50     |          |          |                      |          |      |          |                   |                   |   |  |
| QAE60U  |           | 60               | ●           |                               | ●   | ●                   | ●             | ●           | ●              | ●        | ●        | 91       |         |          |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| QAE100U |           | 100              | ●           |                               | ●   | ●                   | ●             | ●           | ●              | ●        | 90       |          |         |          |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| QAE100W |           | 90               | ●           | 8.5 – 36<br>16.5 – 75         | ●   | ●                   | ●             | ●           | ●              | ●        | ●        | 90       |         |          |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |
| QAE150W |           | 132              | ●           | 40 – 160                      | ●   | ●                   | ●             | ●           | ●              | ●        | 90       |          |         |          |          |                      |          |         |          |          |          |                      |          |      |          |                   |                   |   |  |



| Series    | Footprint            | Output Power (W) | Input Ratio |     |     | Input Voltage (VDC)               | Single Output | Dual Output | Output Voltage |          |          |          |         |         |         |         |         |         |         |         |          |          |          |                      | Eff. (%)           | Isolation Voltage  | Dimensions (Inch) |   |  |
|-----------|----------------------|------------------|-------------|-----|-----|-----------------------------------|---------------|-------------|----------------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------------------|--------------------|--------------------|-------------------|---|--|
|           |                      |                  | 12:1/8:1    | 4:1 | 2:1 |                                   |               |             | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout | 24 Vout | 28 Vout | 30 Vout | 48 Vout | 53 Vout | ±5 Vout | ±12 Vout | ±15 Vout | ±24 Vout | L                    |                    |                    | W                 | H |  |
| HAE75W    | 1/2 Brick            | 75               | ●           |     |     | 9 – 36<br>18 – 75<br>43 – 160     | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 91       | 3000 VAC<br>3000 VDC | 2.40   2.28   0.50 |                    |                   |   |  |
| HAE100W   |                      | 100              | ●           |     |     | 8.5 – 36<br>16.5 – 75<br>43 – 160 | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 93       |                      |                    |                    |                   |   |  |
| HAE150W   |                      | 182              | ●           |     |     |                                   | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 91       |                      |                    |                    |                   |   |  |
| HAE200W   |                      | 240              | ●           |     |     |                                   | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 91       |                      |                    |                    |                   |   |  |
| HAE150U   |                      | 150              | ●           |     |     | 16 – 160                          | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 92.5     | 3000 VAC             |                    |                    |                   |   |  |
| HAE200U   |                      | 200              | ●           |     |     |                                   | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 92       |                      |                    |                    |                   |   |  |
| URED20W   | *Chassis             | 20               | ●           |     |     | 9 – 36<br>18 – 75<br>43 – 160     | ● ●           |             | ● ●            |          |          | ● ●      |         |         |         |         |         |         |         | ● ●     |          |          | 88       | 2250 VDC             | 4.00   2.25   0.75 |                    |                   |   |  |
| UFED40W   |                      | 40               | ●           |     |     | 9.5 – 36<br>18 – 75<br>43 – 160   | ● ●           |             | ● ●            |          |          | ● ● ●    |         |         |         |         |         |         |         | ● ● ●   |          |          | 91       | 3000 VDC<br>1600 VDC |                    |                    |                   |   |  |
| HAE75W-T  | *Chassis             | 75               | ●           |     |     | 9 – 36<br>18 – 75<br>43 – 160     | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 91       | 3000 VAC<br>3000 VDC | 3.35   2.40   1.59 |                    |                   |   |  |
| HAE100W-T |                      | 100              | ●           |     |     | 8.5 – 36<br>16.5 – 75<br>43 – 160 | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 93       |                      |                    |                    |                   |   |  |
| HAE150W-T |                      | 182              | ●           |     |     |                                   | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ● ●     |         |         |          |          | 91       |                      |                    |                    |                   |   |  |
| HAE200W-T |                      | 240              | ●           |     |     |                                   | ●             |             | ● ●            |          |          | ● ● ● ●  | ●       |         |         |         |         | ● ●     |         |         |          |          | 91       |                      |                    |                    |                   |   |  |
| WAF150W   | *Chassis<br>Din-rail | 150              | ●           |     |     | 9 – 36<br>18 – 75<br>43 – 160     | ●             |             |                |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 89       | 3000 VDC<br>2250 VDC | 3.86   2.56   0.67 | 6.00   4.00   1.52 |                   |   |  |
| WAF300W   |                      | 200              | ●           |     |     | 18 – 75<br>43 – 160               | ●             |             |                |          |          | ● ● ● ●  | ●       |         |         |         |         | ●       |         |         |          |          | 92       | 3000 VAC             |                    |                    |                   |   |  |

\*Chassis: Chassis mount



**POWER SOLUTIONS  
FOR  
MEDICAL  
APPLICATIONS**  
AC/DC Power Supplies



| Series       | Open Frame | Enclosed | Encapsulated | Pin Connection Type |      | Output Power (W) |          | Input Voltage (VAC) | Single Output | Dual Output | Triple Output | Output Voltage |          |         |         |         |         |         |         |         |         |         |   |   |   | Eff. (%) | Leakage Current (µA) | Isolation Voltage (VAC) | Dimensions (Inch) |      |      |      |      |      |
|--------------|------------|----------|--------------|---------------------|------|------------------|----------|---------------------|---------------|-------------|---------------|----------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|---|---|----------|----------------------|-------------------------|-------------------|------|------|------|------|------|
|              |            |          |              | Con.                | Peak | 3.3 Vout         | 5.0 Vout |                     |               |             |               | 7.5 Vout       | 9.0 Vout | 12 Vout | 15 Vout | 18 Vout | 24 Vout | 28 Vout | 36 Vout | 48 Vout | 53 Vout | 54 Vout | L | W | H |          |                      |                         |                   |      |      |      |      |      |
| MSC15        |            |          | ●            | ●                   | 15   |                  |          | 85 – 264            | ●             |             |               | ●              | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | ●                       | 89                | 75   | 4000 | 2.82 | 1.14 | 0.82 |
| MSD30        |            |          | ●            | ●                   | 30   |                  |          |                     | ●             |             |               | ●              | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | ●                       | 91.5              | 100  |      | 3.95 | 1.50 | 1.00 |
| MSD40        |            |          | ●            | ●                   | 40   |                  |          |                     | ●             |             |               |                | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 93                      | 75                | 4.30 |      | 2.20 | 1.20 |      |
| MSD65        |            |          | ●            | ●                   | 65   |                  |          |                     | ●             |             |               |                | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 93.5                    | 75                | 4.30 |      | 2.20 | 1.20 |      |
| MAC15        | ●          |          |              |                     | 15   |                  |          |                     | ●             |             |               |                | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 89                      | 75                | 2.61 |      | 1.00 | 0.62 |      |
| MAD30        | ●          |          |              |                     | 30   |                  |          |                     | ●             |             |               |                | ●        | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 91.5                    | 100               | 3.34 |      | 1.36 | 0.77 |      |
| MAD40 Single | ●          | ●        |              |                     | 40   |                  |          |                     | ●             |             |               |                |          | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 93                      | 75                | 3.00 |      | 2.00 | 0.94 |      |
| MAD40 Multi  | ●          | ●        |              |                     | 40   |                  |          |                     | ●             | ●           | ●             |                | ●        | ●       |         |         | ●       | ●       |         |         |         |         |   |   |   |          |                      | 90                      | 75                | 3.50 |      | 2.00 | 0.98 |      |
| MAD65 Single | ●          | ●        |              |                     | 65   |                  |          |                     | ●             |             |               |                |          | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● | ● | ●        | ●                    | 93.5                    | 75                | 3.00 |      | 2.00 | 0.94 |      |
| MAD65 Multi  | ●          | ●        |              |                     | 65   |                  |          |                     | ●             | ●           | ●             |                | ●        | ●       |         |         | ●       | ●       |         |         |         |         |   |   |   |          |                      | 90.5                    | 75                | 3.50 |      | 2.00 | 0.98 |      |
| MAD50        | ●          | ●        |              | ●                   | 50   | 70               |          |                     | ●             |             |               |                | ●        | ●       | ●       | ●       |         | ●       |         |         | ●       | ●       | ● | ● |   |          |                      | 92.5                    | 100               | 3.00 |      | 1.50 | 1.08 |      |
| MAD100       | ●          | ●        |              |                     | 100  |                  |          |                     | ●             |             |               |                |          | ●       | ●       |         | ●       | ●       | ●       | ●       |         |         |   |   |   |          |                      | 92                      | 75                | 3.00 |      | 2.00 | 1.16 |      |
| MAF150       | ●          | ●        |              |                     | 150  |                  |          |                     | ●             |             |               |                |          | ●       | ●       |         | ●       | ●       | ●       | ●       |         |         |   |   |   |          |                      | 92                      | 100               | 4.00 |      | 2.00 | 1.16 |      |
| MAD180       | ●          | ●        |              |                     | 180  | 220              |          |                     | ●             |             |               |                |          | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● | ● |   |          |                      | 94                      | 100               | 3.00 |      | 2.00 | 1.24 |      |
| MAH240       | ●          |          |              |                     | 240  | 300              |          |                     | ●             |             |               |                |          | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● |   |   |          |                      | 91                      | 100               | 5.00 |      | 3.00 | 1.32 |      |
| MAF300       | ●          | ●        |              |                     | 300  | 360              |          |                     | ●             |             |               |                |          | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ●       | ● |   |   |          |                      | 93                      | 100               | 4.00 |      | 2.09 | 1.26 |      |
| MAH450       | ●          | ●        |              |                     | 450  |                  |          |                     | ●             |             |               |                |          | ●       | ●       |         | ●       | ●       | ●       | ●       | ●       | ●       |   |   |   |          |                      | 94                      | 100               | 5.00 |      | 3.00 | 1.58 |      |



**POWER SOLUTIONS**  
**FOR**  
**MEDICAL**  
**APPLICATIONS**  
DC/DC Converters



Medical

| Series         | Footprint        | Output Power (W) | Input Ratio |                                         | Input Voltage (VDC)                               | Single Output | Dual Output | Output Voltage |          |          |          |         |         |         |         |          | Eff. (%) | Leakage Current (μA) | Clearance Creepage (mm) | Isolation Voltage | Dimensions (Inch) |      |      |      |
|----------------|------------------|------------------|-------------|-----------------------------------------|---------------------------------------------------|---------------|-------------|----------------|----------|----------|----------|---------|---------|---------|---------|----------|----------|----------------------|-------------------------|-------------------|-------------------|------|------|------|
|                |                  |                  | 4:1         | 2:1                                     |                                                   |               |             | 3.3 Vout       | 5.0 Vout | 5.1 Vout | 9.0 Vout | 12 Vout | 15 Vout | 24 Vout | ±5 Vout | ±12 Vout |          |                      |                         |                   | ±15 Vout          | L    | W    | H    |
| MPU01          | SIP-9            | 1                |             |                                         | 4.5 – 5.5<br>9.6 – 14.4<br>12 – 18<br>19.2 – 28.8 | ●             | ●           | ●              | ●        |          |          | ●       | ●       |         | ●       | ●        | ●        | 85                   | 2                       | 8                 | 2MOPP<br>5000 VAC | 0.77 | 0.49 | 0.39 |
| MPU02          |                  | 2                |             |                                         | 4.5 – 7<br>9.6 – 14.4<br>12 – 18<br>19.2 – 28.8   | ●             | ●           | ●              | ●        |          |          | ●       | ●       |         | ●       | ●        | ●        | 84                   |                         |                   |                   |      |      |      |
| MPL02          | SIP-8            | 2                | ●           | 4.5 – 12<br>9 – 18<br>18 – 36           | ●                                                 | ●             | ●           | ●              |          |          | ●        | ●       |         | ●       | ●       | ●        | 85       | 0.86                 |                         |                   |                   | 0.39 | 0.40 |      |
| MPS02<br>MPH02 | SMD-16<br>DIP-16 | 2                | ●           | 4.5 – 12<br>9 – 18                      | ●                                                 | ●             | ●           | ●              |          | ●        | ●        | ●       | ●       |         | ●       | ●        | 82       | 0.95                 |                         |                   |                   | 0.57 | 0.40 |      |
| MPS04<br>MPH04 |                  | 3.5              | ●           | 18 – 36<br>36 – 75                      | ●                                                 | ●             |             | ●              |          | ●        | ●        | ●       |         | ●       | ●       | 83       |          |                      |                         |                   |                   |      |      |      |
| MPP03          | DIP-24           | 3                | ●           | 4.5 – 9<br>9 – 18<br>18 – 36<br>36 – 75 | ●                                                 | ●             | ●           | ●              |          |          | ●        | ●       | ●       | ●       | ●       | ●        | 87       | 1.25                 |                         |                   |                   | 0.80 | 0.40 |      |
| MPP06          |                  | 6                | ●           |                                         | ●                                                 | ●             | ●           | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 89       |          |                      |                         |                   |                   |      |      |      |
| MPK06          |                  | 6                | ●           |                                         | ●                                                 | ●             |             | ●              |          |          | ●        | ●       |         | ●       | ●       | 87       |          |                      |                         |                   |                   |      |      |      |
| MPP10          |                  | 10               | ●           |                                         | ●                                                 | ●             | ●           |                |          | ●        | ●        | ●       | ●       | ●       | 89      |          |          |                      |                         |                   |                   |      |      |      |
| MPP03W         |                  | 3                | ●           | 9 – 36<br>18 – 75                       | ●                                                 | ●             | ●           | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 87       |          |                      |                         |                   |                   |      |      |      |
| MPP06W         |                  | 6                | ●           |                                         | ●                                                 | ●             | ●           |                |          | ●        | ●        | ●       | ●       | ●       | 89      |          |          |                      |                         |                   |                   |      |      |      |
| MPP10W         |                  | 10               | ●           |                                         | ●                                                 | ●             | ●           |                |          | ●        | ●        | ●       | ●       | ●       | 89      |          |          |                      |                         |                   |                   |      |      |      |
| MPM15          | 1.6"x1"          | 15               | ●           | 9 – 18<br>18 – 36<br>36 – 75            | ●                                                 | ●             |             | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 90       | 1.60     | 1.00                 | 0.40                    |                   |                   |      |      |      |
| MPM20          |                  | 20               | ●           | ●                                       | ●                                                 |               | ●           |                |          | ●        | ●        | ●       | ●       | ●       | 90      |          |          |                      |                         |                   |                   |      |      |      |
| MPM15W         |                  | 15               | ●           | 9 – 36<br>18 – 75                       | ●                                                 | ●             |             | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 89.5     |          |                      |                         |                   |                   |      |      |      |
| MPM20W         |                  | 20               | ●           | ●                                       | ●                                                 |               | ●           |                |          | ●        | ●        | ●       | ●       | ●       | 89      |          |          |                      |                         |                   |                   |      |      |      |
| MPD30          | 2"x1"            | 30               | ●           | 9 – 18<br>18 – 36<br>36 – 75            | ●                                                 | ●             |             | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 90.5     | 2.00     | 1.00                 | 0.40                    |                   |                   |      |      |      |
| MPD30W         |                  | 30               | ●           | 9 – 36<br>18 – 75                       | ●                                                 | ●             |             | ●              |          |          | ●        | ●       | ●       | ●       | ●       | 90.5     |          |                      |                         |                   |                   |      |      |      |
| MPQ60W         | 1/4 Brick        | 60               | ●           | 9 – 36<br>18 – 75                       | ●                                                 | ●             |             | ●              | ●        |          | ●        | ●       | ●       |         | ●       | ●        | 92.5     | 4.5                  | 8                       |                   | 2.28              | 1.45 | 0.50 |      |

