

## KEY FEATURES

- Power Modules for PCB Mounting
- Six-sided Continuous Shield
- High Efficiency
- Standard Package
- 2-Year Product Warranty

## PRELIMINARY



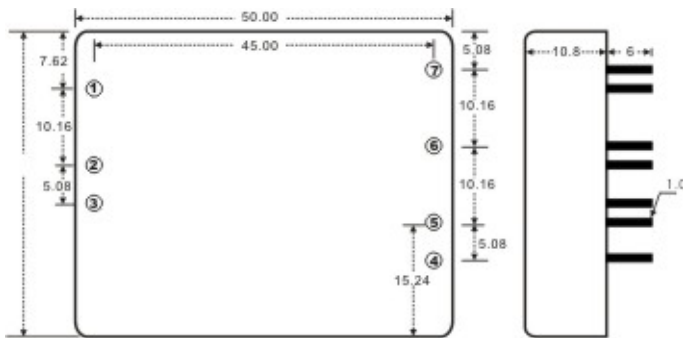
## ELECTRICAL SPECIFICATIONS

| Model No.               | SK40-48-1.8S  | SK40-48-2.5S  | SK40-48-3.3S  | SK40-48-5S   | SK40-48-12S  | SK40-48-15S  | SK40-48-24S  |
|-------------------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| Max. output wattage (W) | 40W           | 40W           | 40W           | 40W          | 40W          | 40W          | 40W          |
| Input voltage (V.DC.)   | 48V (36-75V)  | 48V (36-75V)  | 48V (36-75V)  | 48V (36-75V) | 48V (36-75V) | 48V (36-75V) | 48V (36-75V) |
| Output voltage (V.DC.)  | 1.8V / 8000mA | 2.5V / 8000mA | 3.3V / 8000mA | 5V / 8000mA  | 12V / 3333mA | 15V / 2666mA | 24V / 1666mA |
| Efficiency (%)          | 80%           | 83%           | 85%           | 87%          | 87%          | 88%          | 89%          |

| Model No.    ( Single Output ) |                                  | SK40-48-1.8S                                                      | SK40-48-2.5S | SK40-48-3.2S | SK40-48-5S | SK40-48-12S | SK40-48-15S | SK40-48-24S |
|--------------------------------|----------------------------------|-------------------------------------------------------------------|--------------|--------------|------------|-------------|-------------|-------------|
| Max output wattage (W)         |                                  | 40W                                                               | 40W          | 40W          | 40W        | 40W         | 40W         | 40W         |
| Input                          | Input filter                     | $\pi$ type                                                        |              |              |            |             |             |             |
| Output                         | Voltage (V.DC.)                  | 1.8                                                               | 2.5          | 3.3          | 5          | 12          | 15          | 24          |
|                                | Voltage accuracy                 | ±1%                                                               | ±1%          | ±1%          | ±1%        | ±1%         | ±1%         | ±1%         |
|                                | Current (mA) max                 | 8000                                                              | 8000         | 8000         | 8000       | 3333        | 2666        | 1666        |
|                                | Line regulation (HL-LL) (typ.)   | ±0.5%                                                             | ±0.5%        | ±0.5%        | ±0.5%      | ±0.5%       | ±0.5%       | ±0.5%       |
|                                | Load regulation (10-100%) (typ.) | ±1%                                                               | ±1%          | ±1%          | ±1%        | ±1%         | ±1%         | ±1%         |
|                                | Ripple                           | <0.2% Vout +20mV max (Vp-p)                                       |              |              |            |             |             |             |
|                                | Noise                            | <0.5% Vout +50mV max (Vp-p)                                       |              |              |            |             |             |             |
|                                | Switching frequency              | 400KHz                                                            | 400KHz       | 400KHz       | 400KHz     | 400KHz      | 400KHz      | 400KHz      |
| Protection                     | Over current protection          | Works over 120% of rating and recovers automatically.             |              |              |            |             |             |             |
|                                | Over voltage protection          | Zener diode clamp                                                 |              |              |            |             |             |             |
|                                | Short circuit protection         | Hiccup, auto-recovery                                             |              |              |            |             |             |             |
| Isolation                      | Voltage                          | 1600 VDC.                                                         |              |              |            |             |             |             |
|                                | Resistance                       | 10 <sup>9</sup> ohms                                              |              |              |            |             |             |             |
|                                | Capacitance                      | 1000 pF                                                           |              |              |            |             |             |             |
| Environment                    | Operating temperature            | -25°C...+71°C                                                     |              |              |            |             |             |             |
|                                | Storage temperature              | -55°C...+105°C                                                    |              |              |            |             |             |             |
|                                | Case temperature                 | +95°C max.                                                        |              |              |            |             |             |             |
|                                | Temperature coefficient          | ±0.02% Per°C                                                      |              |              |            |             |             |             |
|                                | Humidity                         | 95% RH                                                            |              |              |            |             |             |             |
|                                | MTBF                             | >550,000 h @ 25°C (MIL-HDBK-217F)                                 |              |              |            |             |             |             |
| Physical                       | Dimension (L x W x H)            | 2 x 1.6 x 0.42 Inches (50.0 x 40.0x 10.67 mm)                     |              |              |            |             |             |             |
|                                | Case Material                    | Nickel-Coated Copper with Non-Conductive base, six-side shielded. |              |              |            |             |             |             |
|                                | Weight                           | 50 g                                                              |              |              |            |             |             |             |
|                                | Cooling method                   | Free-air convection                                               |              |              |            |             |             |             |

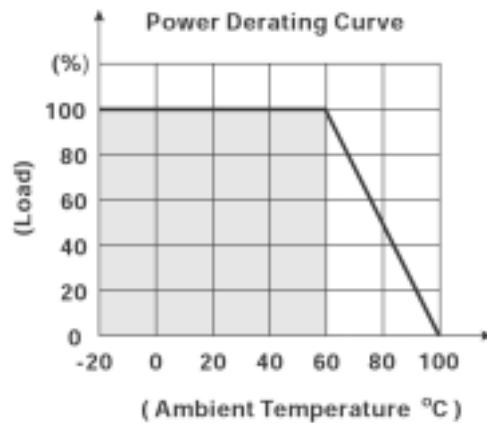
All specifications valid at nominal input voltage, full load and  $+25^{\circ}C$  after warm-up time unless otherwise stated.

## MECHANICAL DIMENSION (Top View)



| PIN# | Single   |
|------|----------|
| 1    | ON / OFF |
| 2    | -VIN     |
| 3    | +VIN     |
| 4    | NC       |
| 5    | +VOUT    |
| 6    | -VOUT    |
| 7    | TRIM     |

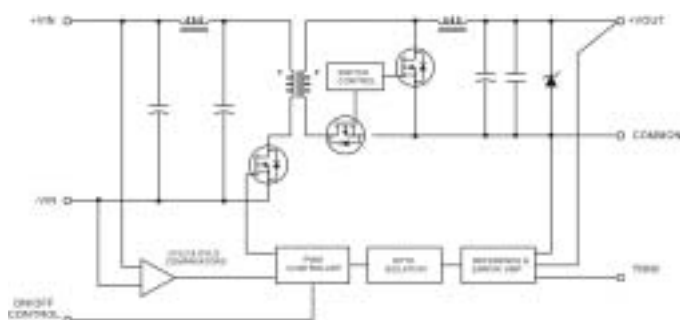
## DERATING



## BLOCK DIAGRAM

Output Voltage (V.DC) : 1.8V, 2.5V, 3.3V, 5V

Output Voltage (V.DC) : 12V, 15V, 24V



### Single Output

