



■ Features :

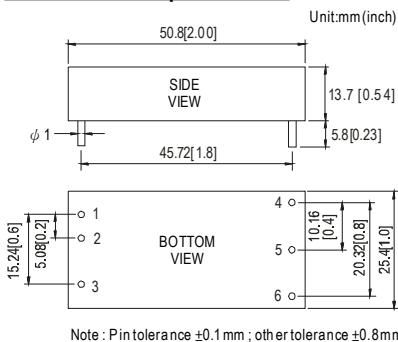
- 2"x1" compact size
- 2:1 wide input range
- High efficiency up to 92%
- 1500VDC I/O isolation
- Built-in remote ON/OFF control
- Built-in trimming output
- Comply with CE / FCC without external components
- Protections: Short circuit / Overload / Input and Output Over voltage
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC / CE
- 2 years warranty



**SPECIFICATION**

| ORDER NO.                      | SKM50B-05   | SKM50C-05   | SKM50B-12    | SKM50C-12    | SKM50B-15  | SKM50C-15 |        |
|--------------------------------|---|---|--------------|--------------|------------|-----------|--------|
| <b>OUTPUT</b>                  | DC VOLTAGE  | 5V  | 12V          | 15V          |            |           |        |
|                                | CURRENT RANGE   | 1 ~ 10A   | 0.41 ~ 4.17A | 0.33 ~ 3.33A |            |           |        |
|                                | RATED POWER   | 50W   |              |              |            |           |        |
|                                | RIPPLE & NOISE (max.) Note.2  | 60mVp-p   | 80mVp-p      | 100mVp-p     |            |           |        |
|                                | LINE REGULATION Note.3  | ±0.2%   |              |              |            |           |        |
|                                | LOAD REGULATION Note.4  | ±0.5%   |              |              |            |           |        |
|                                | VOLTAGE ACCURACY  | ±2.0%   |              |              |            |           |        |
|                                | SWITCHING FREQUENCY   | 300KHz typ.   |              |              |            |           |        |
|                                | EXTERNAL CAPACITANCE LOAD (max.)  | 1000uF  |              |              |            |           |        |
| EXTERNAL TRIM Adj. RANGE(Typ.) | ±10%  |   | -20 ~ +10%   |              | -20 ~ +10% |           |        |
| <b>INPUT</b>                   | VOLTAGE RANGE   | B: 18 ~ 36VDC C: 36 ~ 75VDC   |              |              |            |           |        |
|                                | UNDER VOLTAGE SHUTDOWN  | B: 16VDC C: 32VDC   |              |              |            |           |        |
|                                | EFFICIENCY (Typ.)   | 91%   | 92%          | 91%          | 90%        | 91%       |        |
|                                | DC CURRENT  | Full load   | 2300mA       | 1160mA       | 2300mA     | 1160mA    | 2300mA |
|                                |   | No load   | 110mA        | 60mA         | 110mA      | 60mA      | 110mA  |
|                                | FILTER  | Pi network  |              |              |            |           |        |
| REMOTE CONTROL                 | Power ON : R.C ~ -Vin > 2.5VDC or open circuit ; Power OFF : R.C ~ -Vin < 0.5VDC or short |   |              |              |            |           |        |
| PROTECTION                     | Fuse recommended  |   |              |              |            |           |        |
| <b>PROTECTION (Note. 5)</b>    | OVER CURRENT  | 110% ~ 180% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |              |              |            |           |        |
|                                | SHORT CIRCUIT   | All output equipped with short circuit<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |              |              |            |           |        |
|                                | OVER VOLTAGE  | Input(Typ.) B: >40 ~ 50VDC C: >80 ~ 100VDC input voltage Protection type : Shut down o/p voltage, recovers automatically after fault condition is removed<br>Output(Typ.) 5Vo : 7V ~ 8.95V ; 12Vo : 15V ~ 19.2V ; 15Vo : 18V ~ 23.3V Protection type : Clamp by TVS diode |              |              |            |           |        |
| <b>ENVIRONMENT</b>             | WORKING TEMP.   | -40 ~ +75°C (Refer to "Derating Curve")   |              |              |            |           |        |
|                                | CASE TEMP.  | +115°C max.   |              |              |            |           |        |
|                                | WORKING HUMIDITY  | 20% ~ 90% RH non-condensing   |              |              |            |           |        |
|                                | STORAGE TEMP., HUMIDITY   | -55 ~ +125°C, 10 ~ 95% RH   |              |              |            |           |        |
|                                | TEMP. COEFFICIENT   | ±0.03% / °C (0 ~ 55°C)  |              |              |            |           |        |
|                                | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |              |            |           |        |
| <b>SAFETY &amp; EMC</b>        | WITHSTAND VOLTAGE   | I/P-O/P:1.5KVDC   |              |              |            |           |        |
|                                | ISOLATION RESISTANCE  | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH   |              |              |            |           |        |
|                                | EMC EMISSION Note.5   | Compliance to EN55022 Class A, FCC part 15 Class A without external components  |              |              |            |           |        |
| <b>OTHERS</b>                  | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A   |              |              |            |           |        |
|                                | MTBF  | 700Khrs min. MIL-HDBK-217F(25°C)  |              |              |            |           |        |
|                                | DIMENSION   | 50.8*25.4*13.7 mm or 2**1**0.54" inch (L*W*H)   |              |              |            |           |        |
|                                | WEIGHT  | 43g   |              |              |            |           |        |

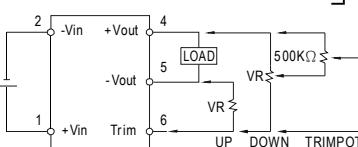
■ Mechanical Specification



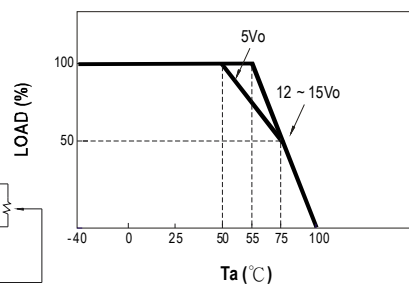
■ Pin Configuration

| Pin No. | Output | Pin No. | Output |
|---------|--------|---------|--------|
| 1       | +Vin   | 4       | +Vout  |
| 2       | -Vin   | 5       | -Vout  |
| 3       | R.C    | 6       | Trim   |

■ External Output Trimming



■ Derating Curve



- NOTE**
- 1.All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
  - 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uF & 47uF capacitor.
  - 3.Line regulation is measured from low line to high line at rated load.
  - 4.Load regulation is measured from 10% to 100% rated load.
  - 5.Consult MEAN WELL for deployment of Class B.
  - 6.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.