

■ Features :

- SIP package
- Industry standard pinout
- 1500VDC I/O isolation
- Built-in EMI filter without external components
- Cooling by free air convection
- Non-conductive plastic case
- 100% burn-in test
- Low cost / High reliability
- 2 years warranty

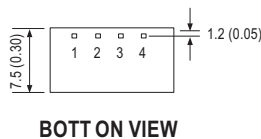
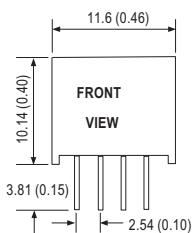


SPECIFICATION

| ORDER NO.    | SMU02L-05                     | SMU02M-05  | SMU02N-05    | SMU02L-12    | SMU02M-12  | SMU02N-12    | SMU02L-15    | SMU02M-15  | SMU02N-15    |              |       |
|--------------|-------------------------------|--|--------------|--------------|------------|--------------|--------------|------------|--------------|--------------|-------|
| OUTPUT       | DC VOLTAGE                    | 5V   |              |              | 12V        |              |              | 15V        |              |              |       |
|              | CURRENT RANGE                 | 80 ~ 400mA   |              |              | 33 ~ 167mA |              |              | 27 ~ 133mA |              |              |       |
|              | RATED POWER                   | 2W   |              |              |            |              |              |            |              |              |       |
|              | RIPPLE & NOISE (max.) Note.2  | 50mVp-p  | 50mVp-p      | 50mVp-p      | 60mVp-p    | 60mVp-p      | 60mVp-p      | 80mVp-p    | 80mVp-p      | 80mVp-p      |       |
|              | LINE REGULATION Note.3        | ±1.2% for 1% input variation   |              |              |            |              |              |            |              |              |       |
|              | LOAD REGULATION Note.4        | ±8.0%  |              |              |            |              |              |            |              |              |       |
|              | VOLTAGE ACCURACY              | ±2.0%  |              |              |            |              |              |            |              |              |       |
|              | SWITCHING FREQUENCY(Typ.)     | 100KHz   |              |              |            |              |              |            |              |              |       |
| INPUT        | VOLTAGE RANGE                 | 4.5 ~ 5.5V   | 10.8 ~ 13.2V | 21.6 ~ 26.4V | 4.5 ~ 5.5V | 10.8 ~ 13.2V | 21.6 ~ 26.4V | 4.5 ~ 5.5V | 10.8 ~ 13.2V | 21.6 ~ 26.4V |       |
|              | EFFICIENCY(Typ.)              | 79%  | 82%          | 80%          | 83%        | 85%          | 84%          | 84%        | 85%          | 84%          |       |
|              | NORMAL VOLTAGE                | 5V   | 12V          | 24V          | 5V         | 12V          | 24V          | 5V         | 12V          | 24V          |       |
|              | INPUT CURRENT                 | Full load  | 500mA        | 210mA        | 107mA      | 500mA        | 210mA        | 107mA      | 500mA        | 210mA        | 107mA |
|              |                               | No load  | 50mA         | 25mA         | 15mA       | 50mA         | 25mA         | 15mA       | 50mA         | 25mA         | 15mA  |
|              | PROTECTION (FUSE RECOMMENDED) | 500mA  | 250mA        | 150mA        | 500mA      | 250mA        | 150mA        | 500mA      | 250mA        | 150mA        |       |
| PROTECTION   | FILTER                        | Capacitor type   |              |              |            |              |              |            |              |              |       |
|              | OVERLOAD                      | Momentary<br>Protection type : Broken                                    |              |              |            |              |              |            |              |              |       |
|              | SHORT CIRCUIT                 | Momentary<br>Protection type : Broken                                    |              |              |            |              |              |            |              |              |       |
| ENVIRONMENT  | WORKING TEMP.                 | -40 ~ +85°C (Refer to "Derating Curve")                                  |              |              |            |              |              |            |              |              |       |
|              | WORKING HUMIDITY              | 20% ~ 90% RH non-condensing  |              |              |            |              |              |            |              |              |       |
|              | STORAGE TEMP., HUMIDITY       | -55 ~ +125°C, 10 ~ 95% RH  |              |              |            |              |              |            |              |              |       |
|              | TEMP. COEFFICIENT             | ±0.05% / °C (0 ~ 50°C)   |              |              |            |              |              |            |              |              |       |
|              | VIBRATION                     | 10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes |              |              |            |              |              |            |              |              |       |
| SAFETY & EMC | WITHSTAND VOLTAGE             | I/P-O/P: 1.5KVDC   |              |              |            |              |              |            |              |              |       |
|              | ISOLATION RESISTANCE          | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH                              |              |              |            |              |              |            |              |              |       |
|              | ISOLATION CAPACITANCE         | 80pF max.  |              |              |            |              |              |            |              |              |       |
|              | EMI RADIATION                 | Compliance to EN55022 Class B, FCC part 15 Class B                       |              |              |            |              |              |            |              |              |       |
|              | EMS IMMUNITY                  | Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A     |              |              |            |              |              |            |              |              |       |
| OTHERS       | MTBF                          | 100Khrs min. MIL-HDBK-217F(25°C)   |              |              |            |              |              |            |              |              |       |
|              | DIMENSION (L*W*H)             | 11.6*7.5*10.14mm or 0.46**0.30**0.40" inch                               |              |              |            |              |              |            |              |              |       |
|              | WEIGHT                        | 1.3g   |              |              |            |              |              |            |              |              |       |

■ Mechanical Specification

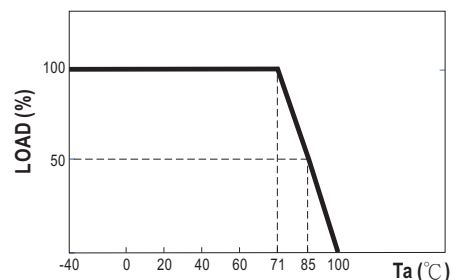
Unit: mm (inch)



■ Pin Configuration

| Pin No. | Output |
|---------|--------|
| 1       | -Vin   |
| 2       | +Vin   |
| 3       | -Vout  |
| 4       | +Vout  |

■ 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 20% to 100% rated load.