

■ 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

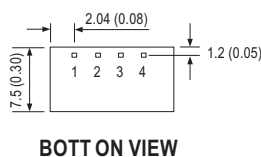
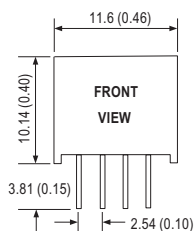


SPECIFICATION

| 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 | |
| FILTER | Capacitor type | | | | | | | | | | |
| PROTECTION | OVERLOAD | Momentary Protection type : Broken | | | | | | | | | |
| | SHORT CIRCUIT | Momentary 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 | SAFETY STANDARDS | EAC TP TC 004 approved | | | | | | | | | |
| | 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 EN55032 Class B, FCC part 15 Class B, EAC TP TC 020 | | | | | | | | | |
| OTHERS | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A, EAC TP TC 020 | | | | | | | | | |
| | 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)



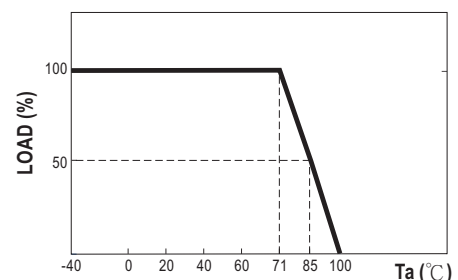
BOTT ON VIEW

Pin Size is 0.50*0.30mm(0.02**0.01")

■ 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.