

Features :

- 1500VDC I/O isolation
- 3000VDC I/O isolation(optional)
- Operating temperature range of -40 ~ +85°C without derating
- Internal SMD technology
- Built-in EMI filter
- Cooling by free air convection
- Non-conductive plastic case
- SIP package
- Industry standard pinout
- 100% burn-in test
- Low cost / High reliability
- 2 years warranty



SELECTION GUIDE

| ORDER NO. | SMU01L-05 | SMU01M-05 | SMU01N-05 | SMU01L-09 | SMU01M-09 | SMU01N-09 |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| DC OUTPUT VOLTAGE | 5V | | | 9V | | |
| OUTPUT CURRENT RANGE | 0 ~ 200mA | | | 0 ~ 110mA | | |
| EFFICIENCY(Typ.) | 77% | 79% | 78% | 77% | 79% | 76% |

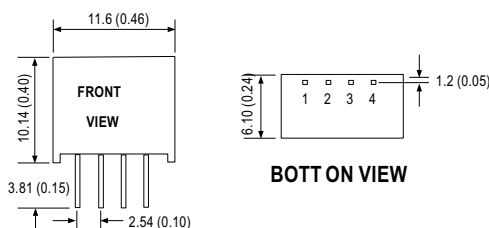
| ORDER NO. | SMU01L-12 | SMU01M-12 | SMU01N-12 | SMU01L-15 | SMU01M-15 | SMU01N-15 |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| DC OUTPUT VOLTAGE | 12V | | | 15V | | |
| OUTPUT CURRENT RANGE | 0 ~ 84mA | | | 0 ~ 67mA | | |
| EFFICIENCY(Typ.) | 78% | 80% | 77% | 78% | 80% | 77% |

SPECIFICATION

| | | | | | | | | |
|--------------|--|--|--------------|--------------|------------|--------------|--------------|------|
| OUTPUT | RATED POWER | 1W | | | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-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 | |
| | NORMAL VOLTAGE | 5V | 12V | 24V | 5V | 12V | 24V | |
| | INPUT CURRENT | Full load | 265mA | 110mA | 57mA | 265mA | 110mA | 57mA |
| | | No load | 32mA | 15mA | 11mA | 32mA | 15mA | 11mA |
| | PROTECTION (FUSE RECOMMENDED) | 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 ~ +90°C (Refer to output load 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 | 700khrs min. MIL-HDBK-217F(25°C) | | | | | | |
| | DIMENSION (L*W*H) | 11.6*6.1*10.14mm or 0.46**0.24**0.40" inch for 5V,12V input ; 11.6*7.4*10.14mm or 0.46**0.29**0.40" inch for 24V input | | | | | | |
| | WEIGHT | 1.3g | | | | | | |

Mechanical Specification

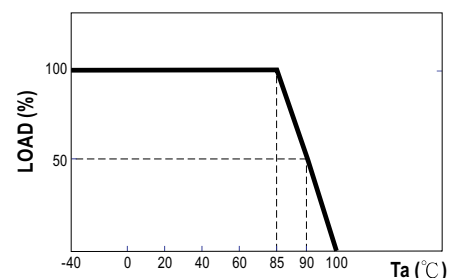
Unit: mm (inch)



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.

