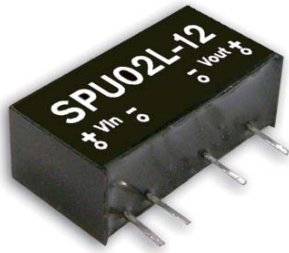




THE DATASHEET OF SPU02M-12





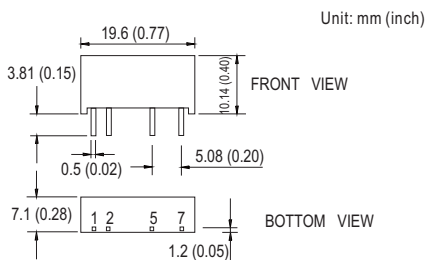
- Features :
 - 3000VDC I/O isolation
 - Internal SMD technology
 - Built-in EMI filter
 - Protection: Short circuit
 - Cooling by free air convection
 - Non-conductive plastic case
 - Single in line package
 - 100% full load burn-in test
 - Low cost / High reliability
 - 2 years warranty



SPECIFICATION

| ORDER NO. | SPU02L-05 | SPU02M-05 | SPU02N-05 | SPU02L-12 | SPU02M-12 | SPU02N-12 | SPU02L-15 | SPU02M-15 | SPU02N-15 | | |
|---------------------|------------------------------|--------------------------------------------------------------------------|----------------------------------------------------|--------------|--------------|------------|--------------|--------------|------------|--------------|--------------|
| OUTPUT | DC OUTPUT VOLTAGE | | | 12V | | | 15V | | | | |
| | CURRENT RANGE | | | 33 ~ 167mA | | | 27 ~ 133mA | | | | |
| | EFFICIENCY (Typ.) | | 77% | 79% | 77% | 80% | 81% | 80% | 81% | 83% | 82% |
| | RATED POWER | | 2W | | | | | | | | |
| | 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 | | 100KHz min. | | | | | | | | | |
| 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 |
| | NORMAL VOLTAGE | | 5V | 12V | 24V | 5V | 12V | 24V | 5V | 12V | 24V |
| | INPUT CURRENT | Full load | 520mA | 214mA | 107mA | 520mA | 214mA | 107mA | 520mA | 214mA | 107mA |
| | | No load | 60mA | 20mA | 15mA | 60mA | 20mA | 15mA | 60mA | 20mA | 15mA |
| | FILTER | | Capacitor type | | | | | | | | |
| PROTECTION | | Fuse recommended | | | | | | | | | |
| PROTECTION | OVERLOAD | | Momentary Protection type : Broken | | | | | | | | |
| | SHORT CIRCUIT | | Momentary Protection type : Broken | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | | -40 ~ +71°C (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | | 20% ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | | -40 ~ +105°C, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | | ±0.03% / °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:3KVDC | | | | | | | | |
| | ISOLATION RESISTANCE | | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | ISOLATION CAPACITANCE | | 80pF max. | | | | | | | | |
| | EMC EMISSION | | Compliance to EN55032 Class B, FCC part 15 Class B | | | | | | | | |
| EMC 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 | | 19.6*7.1*10.2mm or 0.77**0.28**0.40" inch (L*W*H) | | | | | | | | |
| | WEIGHT | | 2.3g | | | | | | | | |

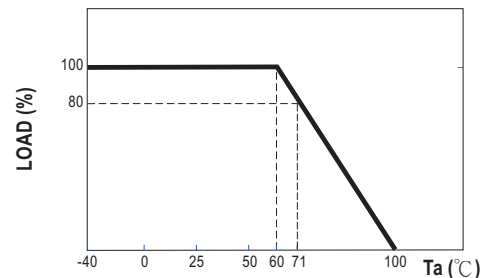
■ Mechanical Specification



■ Pin Configuration

| Pin No. | Output |
|---------|--------|
| 1 | +Vin |
| 2 | -Vin |
| 5 | -Vout |
| 7 | +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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View SPU02M-12 on WIN SOURCE](#)
- [Mean Well Enterprises Co., Ltd. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

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- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management