



2W DC-DC Unregulated Single Output Converter

SMU02 series



■ 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

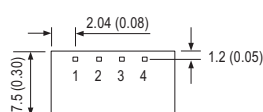
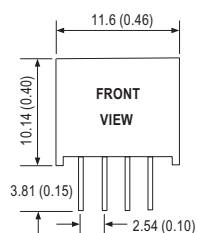


SPECIFICATION

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 Protection type : Broken									
	SHORT CIRCUIT	Momentary Protection type : Broken									
ENVIRONMENT	WORKING TEMP.	-40 ~ +85℃ (Refer to "Derating Curve")									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-55 ~ +125℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.05% / ℃ (0 ~ 50℃)									
	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℃ / 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℃)									
	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)



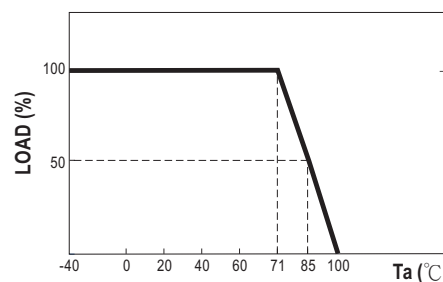
BOTTOM VIEW

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.