



3W DC-DC Unregulated Single Output Converter

SPU03 series



■ Features :

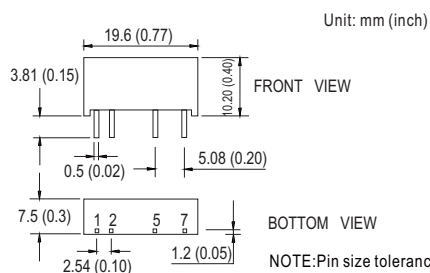
- 3000VDC I/O isolation
- Internal SMD technology
- Built-in EMI filter
- Protection: Short circuit
- Cooling by free air convection
- Non-conductive plastic case
- Single in line package
- 100% full load burn-in test
- Low cost / High reliability
- 2 years warranty



SPECIFICATION

ORDER NO.		SPU03L-05	SPU03M-05	SPU03N-05	SPU03L-12	SPU03M-12	SPU03N-12	SPU03L-15	SPU03M-15	SPU03N-15
OUTPUT	DC OUTPUT VOLTAGE	5V			12V			15V		
	CURRENT RANGE	60 ~ 600mA			25 ~ 250mA			20 ~ 200mA		
	EFFICIENCY (Typ.)	82%	83%	83%	85%	86%	86%	86%	86%	88%
	RATED POWER	3W								
	RIPPLE & NOISE (max.) Note.2	50mVp-p								
	LINE REGULATION Note.3	±1.2% for 1% input variation								
	LOAD REGULATION Note.4	±8.0%								
	VOLTAGE ACCURACY	±2.0%								
	SWITCHING FREQUENCY	60KHz 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	740mA	305mA	155mA	715mA	300mA	150mA	705mA	300mA
		No load	60mA	25mA	15mA	65mA	25mA	15mA	65mA	30mA
	FILTER	Capacitor type								
PROTECTION	PROTECTION	Fuse recommended								
	OVERLOAD	Momentary								
		Protection type : Broken								
	SHORT CIRCUIT	Momentary								
ENVIRONMENT		Protection type : Broken								
	WORKING TEMP.	-40 ~ +90°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)								
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes								
	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								
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A								
	MTBF	700khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	19.6*7.5*10.2mm or 0.77**0.30**0.40" inch (L*W*H)								
	WEIGHT	2.9g								

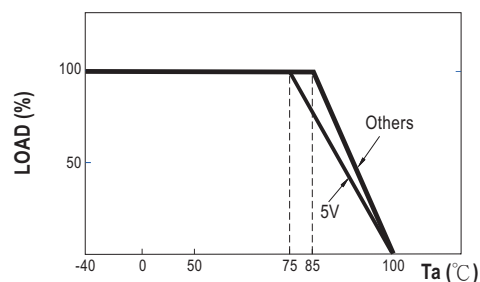
■ Mechanical Specification



■ 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.