

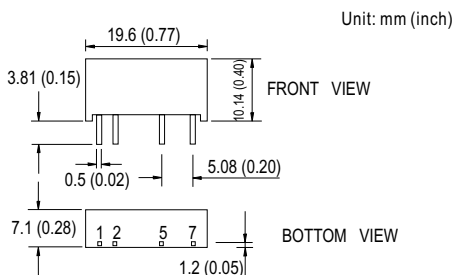
- Features :
  - 3000VDC I/O isolation
  - Internal SMD technology
  - Built-in EMI filter
  - Protection: Short circuit
  - Cooling by free air convection
  - Non-conductive plastic case
  - Single in line package
  - 100% full load burn-in test
  - Low cost / High reliability
  - 2 years warranty



## 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	
	NORMAL VOLTAGE			5V			12V			24V	
	INPUT CURRENT	Full load			520mA			214mA			107mA
		No load			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 output load 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.							
	EMI CONDUCTION & 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			19.6*7.1*10.2mm or 0.77**0.28**0.40" inch (L*W*H)							
	WEIGHT			2.3g							

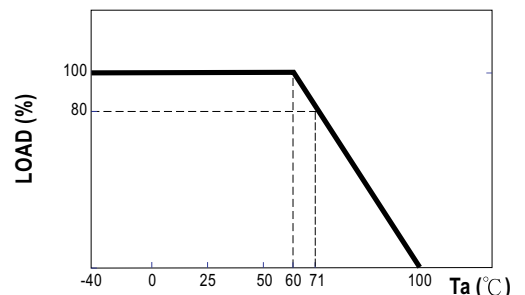
### Mechanical Specification



### Pin Configuration

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

### Derating Curve



### NOTE

- All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
- Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 20% to 100% rated load.