



- Features :
  - 2:1 wide input range
  - 4:1 wide input range (Option)
  - 1000VDC I/O isolation
  - 3000VDC I/O isolation (Option)
  - Built-in remote ON/OFF control
  - Built-in EMI filter
  - Protections: Short circuit / Overload
  - Cooling by free air convection
  - Single in line package
  - 100% full load burn-in test
  - Low cost / High reliability
  - Modified models available: output 3.3V/9V
  - 2 years warranty

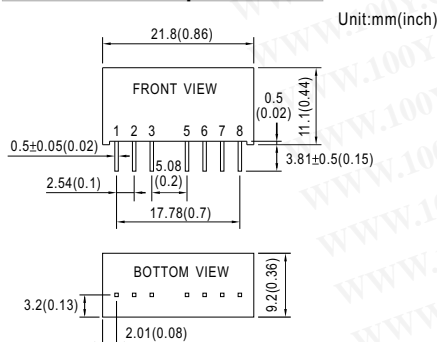
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



**SPECIFICATION**

ORDER NO.	SPA02E-05	SPA02A-05	SPA02B-05	SPA02C-05	SPA02E-12	SPA02A-12	SPA02B-12	SPA02C-12	SPA02E-15	SPA02A-15	SPA02B-15	SPA02C-15												
<b>OUTPUT</b>	<b>DC VOLTAGE</b>				5V				12V				15V											
	<b>CURRENT RANGE</b>				40 ~ 400mA				15 ~ 150mA				17 ~ 167mA											
	<b>RATED POWER</b>				2W				1.8W				2W											
	<b>RIPPLE &amp; NOISE (max.)</b> Note.2				60mVp-p				60mVp-p				60mVp-p											
	<b>LINE REGULATION</b> Note.3				±0.5%				±0.5%				±0.5%											
	<b>LOAD REGULATION</b> Note.4				±0.5%				±0.5%				±0.5%											
	<b>VOLTAGE ACCURACY</b>				±2.0%				±2.0%				±2.0%											
<b>SWITCHING FREQUENCY</b>				100KHz min.				100KHz min.				100KHz min.												
<b>INPUT</b>	<b>VOLTAGE RANGE</b>												E: 4.5 ~ 9VDC A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC											
	<b>EFFICIENCY (Typ.)</b>												71% 76% 76% 74% 74% 80% 80% 82% 76% 80% 80% 80% 78%											
	<b>DC CURRENT</b>												Full load E: 600mA A: 225mA B: 115mA C: 60mA No load E: 50mA A: 25mA B: 15mA C: 8mA											
	<b>FILTER</b>												Pi network											
	<b>PROTECTION</b>												Fuse recommended											
<b>PROTECTION (Note. 5)</b>	<b>OVERLOAD</b>												150 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	<b>SHORT CIRCUIT</b>												All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed											
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>												-40 ~ +85°C (Refer to output load derating curve)											
	<b>WORKING HUMIDITY</b>												20% ~ 90% RH non-condensing											
	<b>STORAGE TEMP., HUMIDITY</b>												-25 ~ +105°C, 10 ~ 95% RH											
	<b>TEMP. COEFFICIENT</b>												±0.05% / °C (0 ~ 50°C)											
	<b>VIBRATION</b>												10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes											
<b>SAFETY</b>	<b>WITHSTAND VOLTAGE</b>												I/P-O/P:1KVDC											
	<b>ISOLATION RESISTANCE</b>												I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH											
	<b>ISOLATION CAPACITANCE</b>												80pF max.											
	<b>EMI CONDUCTION &amp; RADIATION</b>												Compliance to EN55022 Class B, FCC part 15 Class B											
	<b>EMS IMMUNITY</b>												Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A											
<b>OTHERS</b>	<b>REMOTE CONTROL</b>												Power ON : R.C. ~ +Vin < 1VDC or open ; Power OFF : R.C. ~ +Vin > 4VDC or short											
	<b>MTBF</b>												600Khrs min. MIL-HDBK-217F(25°C)											
	<b>DIMENSION</b>												21.8*9.2*11.1mm or 0.86**0.36**0.44" inch (L*W*H)											
	<b>WEIGHT</b>												4.8g											

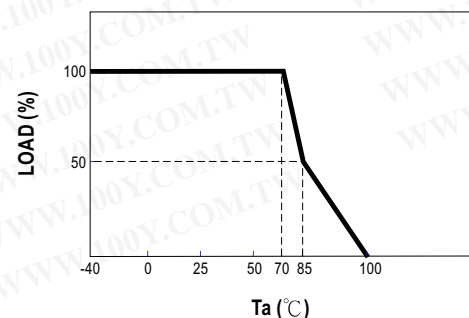
■ Mechanical Specification



■ Pin Configuration

Pin No.	Output
1	-Vin
2	+Vin
3	R.C.
5	N.C.
6	+Vout
7	-Vout
8	N.C.

■ 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 10% to 100% rated load.
- Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.