

### Features :

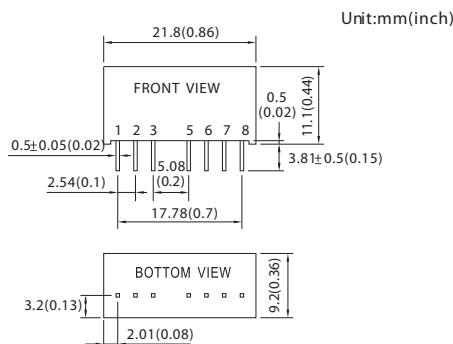
- 2:1 wide input range
- 1000VDC I/O isolation
- Built-in remote ON/OFF control
- Built-in EMI filter
- Protections: Short circuit / Overload
- Cooling by free air convection
- Single in line package
- 100% full load burn-in test
- Low cost / High reliability
- Modified models available: output 3.3V/9V



### SPECIFICATION

ORDER NO.	SPB03E-05	SPB03A-05	SPB03B-05	SPB03C-05	SPB03E-12	SPB03A-12	SPB03B-12	SPB03C-12	SPB03E-15	SPB03A-15	SPB03B-15	SPB03C-15				
OUTPUT	DC VOLTAGE				12V				15V							
	CURRENT RANGE				25 ~ 250mA				20 ~ 200mA							
	RATED POWER												3W			
	RIPPLE & NOISE (max.) Note.2				50mVp-p				60mVp-p				60mVp-p			
	LINE REGULATION Note.3												±0.5%			
	LOAD REGULATION Note.4												±0.5%			
	VOLTAGE ACCURACY												±2.0%			
	SWITCHING FREQUENCY												100KHz min.			
INPUT	VOLTAGE RANGE												E: 4.5 ~ 9VDC A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC			
	EFFICIENCY (Typ.)												74% 73% 77% 78% 76% 80% 80% 79% 75% 80% 80% 82%			
	DC CURRENT												Full load E: 810mA A: 340mA B: 165mA C: 85mA No load E: 110mA A: 40mA B: 20mA C: 10mA			
	FILTER												Pi network			
	PROTECTION												Fuse recommended			
PROTECTION (Note. 5)	OVERLOAD												150 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	SHORT CIRCUIT												All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.												-40 ~ +85°C (Refer to output load derating curve)			
	WORKING HUMIDITY												20% ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY												-25 ~ +105°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT												±0.05% / °C (0 ~ 50°C)			
	VIBRATION												10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes			
SAFETY	WITHSTAND VOLTAGE												I/P-O/P: 1KVDC			
	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	REMOTE CONTROL												Power ON : R.C. ~ +Vin < 1VDC or open ; Power OFF : R.C. ~ +Vin > 4VDC or short			
	MTBF												600Khrs min. MIL-HDBK-217F(25°C)			
	DIMENSION												21.8*9.2* 11.1mm or 0.86** 0.36* 0.44inch (L*W*H)			
	WEIGHT												4.8g			

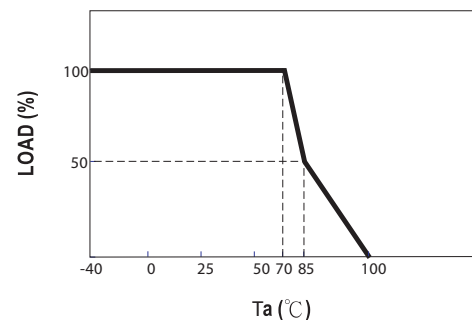
### Mechanical Specification



### 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

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