

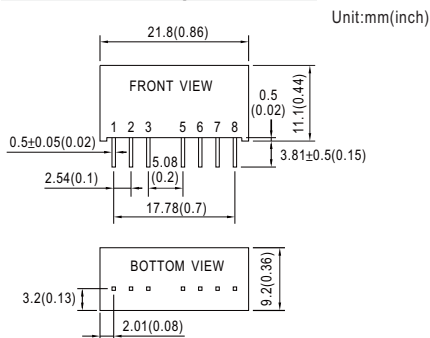
- Features :
  - 2:1 wide input range
  - 1000VDC I/O isolation
  - Built-in remote ON/OFF control
  - Built-in EMI filter
  - Protections: Short circuit / Overload
  - Cooling by free air convection
  - Single in line package
  - 100% full load burn-in test
  - Low cost / High reliability
  - Modified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



## 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				
	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												Capacitor Type
	REMOTE CONTROL												Power ON : R.C. ~ -Vin < 1VDC or open ; Power OFF : R.C. ~ -Vin > 4VDC
	PROTECTION												Fuse recommended
PROTECTION (Note. 5)	OVERLOAD												150 ~ 250% rated output power Protection type : Recovers automatically after fault condition is removed
	SHORT CIRCUIT												All output equipped with short circuit Protection type : Recovers automatically after fault condition is removed
ENVIRONMENT	WORKING TEMP.												-40 ~ +85°C (Refer to "Derating Curve")
	WORKING HUMIDITY												20% ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY												-40 ~ +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	SAFETY STANDARDS												EAC TP TC 004 approved
	WITHSTAND VOLTAGE												I/P-O/P: 1KVDC
	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, EAC TP TC 020
EMC IMMUNITY												Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A, EAC TP TC 020	
OTHERS	MTBF												600Khrs min. MIL-HDBK-217F(25°C)
	DIMENSION												21.8*9.2*11.1mm or 0.86**0.36**0.44" inch (L*W*H)
	WEIGHT												4.8g

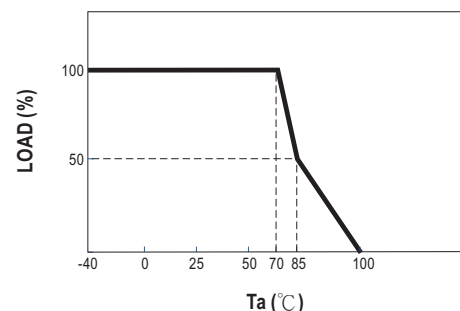
### Mechanical Specification



### 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

- 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.