



1W DC-DC Unregulated Single Output Converter

SBT01 series



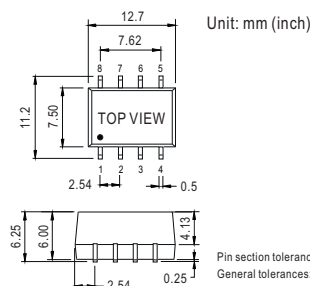
- Features :
 - 1000VDC I/O isolation
 - Internal SMD technology
 - Protection: Short circuit
 - Cooling by free air convection
 - Non-conductive plastic case
 - SMD package styles
 - 100% full load burn-in test
 - Low cost / High reliability
 - Approved: UL / CUL
 - 1 year warranty



SPECIFICATION

MODEL NO.	B0505T-1W	B1205T-1W	B0509T-1W	B1209T-1W	B0512T-1W	B1212T-1W	B0515T-1W	B1215T-1W		
ORDER NO.	SBT01L-05	SBT01M-05	SBT01L-09	SBT01M-09	SBT01L-12	SBT01M-12	SBT01L-15	SBT01M-15		
OUTPUT	DC OUTPUT VOLTAGE	5V		9V		12V		15V		
	OUTPUT CURRENT RANGE	0 ~ 200mA		0 ~ 111mA		0 ~ 84mA		0 ~ 67mA		
	EFFICIENCY	70%	72%	74%	75%	74%	75%	75%		
	RATED POWER	1W								
	RIPPLE & NOISE (max.) Note.2	100mVp-p								
	LINE REGULATION Note.3	±1.2% for 1% input variation								
	LOAD REGULATION Note.4	±8.0%								
	VOLTAGE TOLERANCE	±8.0%								
INPUT	SWITCHING FREQUENCY(Typ.)	100KHz								
	VOLTAGE RANGE	4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V	
	NORMAL VOLTAGE	5V	12V	5V	12V	5V	12V	5V	12V	
	INPUT CURRENT	Full load	292mA	120mA	292mA	120mA	292mA	120mA	292mA	120mA
		No load	29mA	15mA	29mA	15mA	29mA	15mA	29mA	15mA
PROTECTION	Fuse recommended									
PROTECTION	OVERLOAD	Momentary Protection type : Broken								
	SHORT CIRCUIT	Momentary Protection type : Broken								
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	±0.03% / °C (0 ~ 50°C)								
VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC	SAFETY STANDARDS	UL60950-1, CSA C22.2								
	WITHSTAND VOLTAGE	I/P-O/P: 1KVDC								
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH								
OTHERS	MTBF	500khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	12.7*7.5*6.0mm or 0.50"*0.30"*0.24" inch (L*W*H)								
	WEIGHT	1.3g								

Mechanical Specification

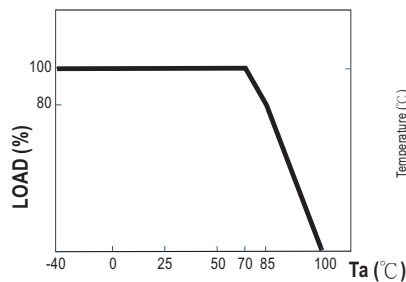


Pin Configuration

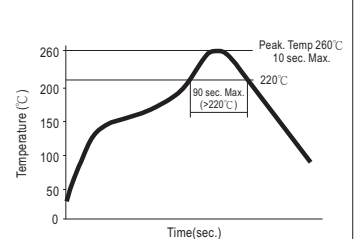
Pin No.	Output
1	-Vin
2	+Vin
3	NC
4	-Vout
5	+Vout
6	NC
7	NC
8	NC

NC : Please DO NOT connect to other pins.

Derating Curve



Reflow Soldering 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 0.1µf & 47µf 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.