

SBT01 series



1W DC-DC Unregulated Single Output Converter



Features :

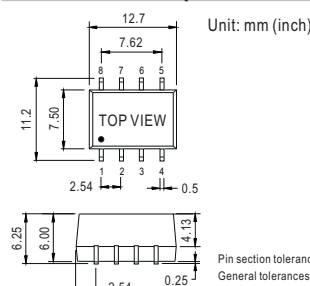
- 1000VDC I/O isolation
- Internal SMD technology
- Protection: Short circuit
- Cooling by free air convection
- Non-conductive plastic case
- SMD package styles
- 100% full load burn-in test
- Low cost / High reliability
- Approved: UL / CUL
- 1 year warranty



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		
	OUTPUT CURRENT RANGE		0 ~ 200mA		0 ~ 111mA		0 ~ 84mA		
	EFFICIENCY		70%	72%	74%	75%	74%	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
	NORMAL VOLTAGE		5V	12V	5V	12V	5V	12V	5V
	INPUT CURRENT	Full load	292mA	120mA	292mA	120mA	292mA	120mA	292mA
		No load	29mA	15mA	29mA	15mA	29mA	15mA	29mA
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

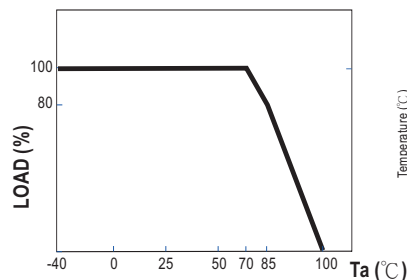


Pin Configuration

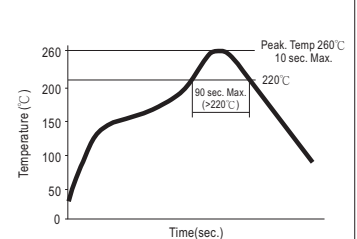
Pin No.	Output
1	-Vin
2	+Vin
3	NC
4	-Vout
5	+Vout
6	NC
7	NC
8	NC

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.

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Note: all features are subject to change without notice.