

- Features :
  - 3000VDC I/O isolation
  - Internal SMD technology
  - Protection: Short circuit
  - Non-conductive plastic case
  - Cooling by free air convection
  - SMD package styles
  - 100% full load burn-in test
  - Low cost / High reliability
  - Approved: UL / CUL
  - 1 year warranty

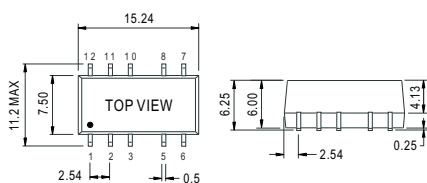
### SPECIFICATION



ORDER NO.	SFT01L-05	SFT01M-05	SFT01L-09	SFT01M-09	SFT01L-12	SFT01M-12	SFT01L-15	SFT01M-15		
OUTPUT	DC OUTPUT VOLTAGE	5V		9V		12V		15V		
	OUTPUT CURRENT RANGE	0 ~ 200mA		0 ~ 111mA		0 ~ 84mA		0 ~ 67mA		
	EFFICIENCY	70%	70%	75%	73%	78%	73%	79%	74%	
	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%								
SWITCHING FREQUENCY(Typ.)	100KHz									
INPUT	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	264mA	123mA	264mA	123mA	264mA	123mA	264mA	123mA
		No load	30mA	19mA	30mA	19mA	30mA	19mA	30mA	19mA
PROTECTION	Fuse recommended									
PROTECTION	OVERLOAD	Momentary Protection type : Broken								
	SHORT CIRCUIT	Momentary Protection type : Broken								
ENVIRONMENT	WORKING TEMP.	-40 ~ +85°C (Refer to output load 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:3KVDC								
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH								
OTHERS	MTBF	500khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	15.24*7.5*6.0mm or 0.60**0.30**0.24" inch (L*W*H)								
	WEIGHT	1.7g								

#### ■ Mechanical Specification

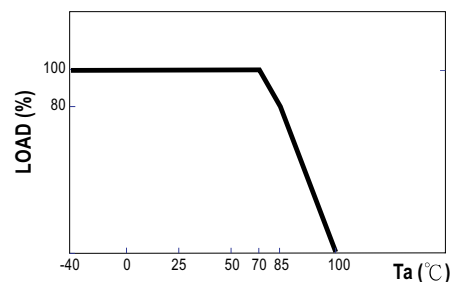
Unit: mm (inch)



#### ■ Pin Configuration

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

#### ■ 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 20% to 100% rated load.

**Model :SFT01L-12**  
V1: +12V/84mA

**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-7.5%~+10% (Max)	I/P:5VDC O/P:50% LOAD Ta:25°C	+1.09%	P
2	RIPPLE & NOISE	150mVp-p (Max)	I/P:5VDC O/P:FULL LOAD Ta:25°C	66mV	P
3	LINE REGULATION	1.2% (Typ) FOR Vin CHANGE OF 1%	I/P:TESTING O/P:FULL LOAD Ta:25°C	1.13%	P
4	LOAD REGULATION	-8%~+8% (Max)	I/P:5VDC O/P:MIN-FULL LOAD Ta:25°C	-2.93%~+3.25%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	78% (Typ)	I/P:5VDC O/P:FULL LOAD Ta:25°C	82.09%	P
2	DC CURRENT	NONE	I/P:5VDC O/P:NO LOAD / FULL LOAD Ta:25°C	27.7mA / NO LOAD 250.9mA / FULL LOAD	P

**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT								
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 8HRS I/P: 5VDC O/P: 100% LOAD Ta= 28.6°C 2. HIGH AMBIENT BURN-IN : 2HRS I/P: 5VDC O/P: 100% LOAD Ta= 85.0°C			P								
		<table border="1"> <thead> <tr> <th>Position</th> <th>P/N</th> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>CENTER</td> <td>48.7°C</td> <td>93.8°C</td> </tr> </tbody> </table>		Position	P/N	1	2	CASE	CENTER	48.7°C	93.8°C		
Position	P/N	1	2										
CASE	CENTER	48.7°C	93.8°C										
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P:5VDC O/P: 100% LOAD Ta= -40°C	TEST : OK	P								

**SAFETY TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:3KVDC/min	I/P-O/P:3KVDC/min Ta:25°C	I/P-O/P:0.02mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>1000MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>9999MΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2006.10.23	SFT01L-12	PASS	PETER CHENG	MAX LIN