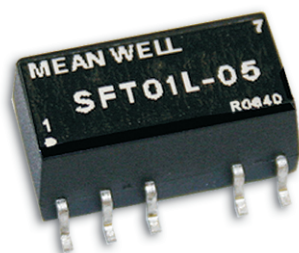




1W DC-DC Unregulated Single Output Converter

SFT01 series



■ 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

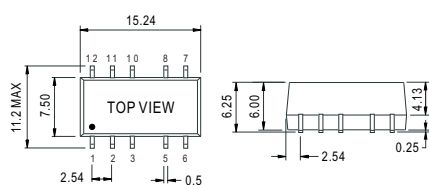
SPECIFICATION



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	123mA
		No load	30mA	19mA	30mA	19mA	30mA	19mA	19mA
PROTECTION	PROTECTION	Fuse recommended							
	OVERLOAD	Momentary							
		Protection type : Broken							
	SHORT CIRCUIT	Momentary							
ENVIRONMENT		Protection type : Broken							
	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							
SAFETY & EMC	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 STANDARDS	UL60950-1, CSA C22.2							
	WITHSTAND VOLTAGE	I/P-O/P: 3KVDC							
OTHERS	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH							
	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

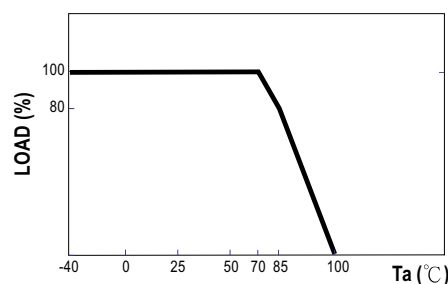
Unit: mm (inch)



■ 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 :SFT01M-05

V1: + 5V/200mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-7.5%~+10% (Max)	I/P:12VDC O/P:50% LOAD Ta:25℃	-2.94%	P
2	RIPPLE & NOISE	150mVp-p (Max)	I/P:12VDC O/P:FULL LOAD Ta:25℃	60mV	P
3	LINE REGULATION	1.2% (Typ) FOR Vin CHANGE OF 1%	I/P:TESTING O/P:FULL LOAD Ta:25℃	1.3%	P
4	LOAD REGULATION	-8%~+8% (Max)	I/P:12VDC O/P:MIN~FULL LOAD Ta:25℃	-3.64% ~ +4.13%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	72% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25℃	72.4%	P
2	DC CURRENT	NONE	I/P:12VDC O/P:NO LOAD / FULL LOAD Ta:25℃	17.1mA / NO LOAD 116.5mA / FULL LOAD	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT								
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 8HRS I/P: 12VDC O/P: 100% LOAD Ta= 28.6℃ 2. HIGH AMBIENT BURN-IN : 2HRS I/P: 12VDC O/P: 100% LOAD Ta= 85.0℃ <table><tr><th>Position</th><th>P/N</th><th>1</th><th>2</th></tr><tr><td>CASE</td><td>UPON CENTER</td><td>61.7℃</td><td>96.4℃</td></tr></table>			Position	P/N	1	2	CASE	UPON CENTER	61.7℃	96.4℃	P
Position	P/N	1	2										
CASE	UPON CENTER	61.7℃	96.4℃										
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P:12VDC O/P: 100% LOAD Ta= -40℃	TEST : OK	P								

**SAFETY TEST**

NO	TEST ITEM	SPECICATION	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	SFT01M-05	PASS	PETER CHENG	MAX LIN