

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

- SMD package with industry standard pinout
- Operating temperature range -40 ~ +90°C
- Comply to EN55032 radiated Class B without additional components
- High efficiency up to 82%
- · Protection: Short circuit
- 3KVDC I/O isolation
- Low cost
- 3 years warranty











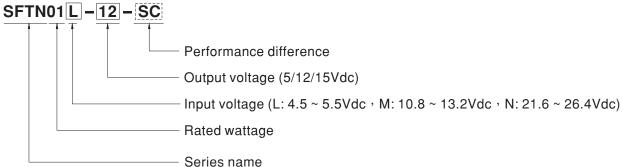
Applications

- Telecom/datacom system
- Wireless network
- Industrial control facility
- Instrument
- Analyzer
- Detector
- · Data switch

Description

SFTN01 series is 1W isolated and unregulated module type DC-DC converter with SMD package. It features international standard pins, a high efficiency up to 82%, wide working temperature range -40~+90°C, 3KVDC I/P-O/P isolation voltage, compliance to EN55032 radiated Class B without additional components, short circuit protection, etc. The models account for different input voltage 5V/12V/24V±10%, and various output voltage, 5V/12V/15V for single output which are suitable for all kinds of systems, Such as industrial control, telecommunication field, distributed power architecture, and so on.

Model Encoding



Type	Description	Note
Blank	-40~+90°C working temperature with max. 1 second short protection	In Stock
SC	-40~+105°C working temperature with continuous short protection	Optional



MODEL SELECTION TABLE							
ORDER NO.	INPUT		OUTPUT				
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT	OUTPUT	EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
		NO LOAD	FULL LOAD	VOLTAGE	CURRENT	,	()
SFTN01L-05	Normal 5V (4.5 ~ 5.5V)	30mA	260mA	5V	20 ~ 200mA	80%	220µF
SFTN01L-12		28mA	257mA	12V	8.4 ~ 84mA	80%	220μF
SFTN01L-15		30mA	253mA	15V	6.7 ~ 67mA	82%	220μF
SFTN01M-05	Normal 12V (10.8 ~ 13.2V)	13mA	107mA	5V	20 ~ 200mA	75%	220μF
SFTN01M-12		12mA	103mA	12V	8.4 ~ 84mA	82%	220μF
SFTN01M-15		13mA	102mA	15V	6.7 ~ 67mA	82%	220μF
SFTN01N-05	Normal 24V (21.6 ~ 26.4V)	10mA	55mA	5V	20 ~ 200mA	77%	220μF
SFTN01N-12		10mA	55mA	12V	8.4 ~ 84mA	75%	220μF
SFTN01N-15		10mA	55mA	15V	6.7 ~ 67mA	78%	220µF

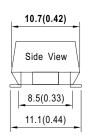


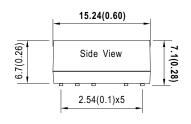
VOLTAGE RANGE	SPECIFICAT	TION						
N. 21.6 - 28.4Vdc			L: 4.5 ~ 5.5Vdc					
SURGE VOLTAGE (1998 mas as 24% models : 18Vdc 2		VOLTAGE RANGE	M: 10.8 ~ 13.2Vdc					
NPUT FILTER			N: 21.6 ~ 26.4Vdc					
NPUT FILTER			5Vin models: 9Vdc					
FILTER		SURGE VOLTAGE (100ms max.)						
PROTECTION Fuse recommended. SVM models: 750mA Slow-Blow Type 124/m models: 300mA Slow-Blow Type 300mA Type 3	INPUT		24Vin models : 30Vdc					
PROTECTION		FILTER	Internal capacitor					
12Vin models: 300mA Slow-Blow Type 24Vin models: 150mA Slow-Blow Type 240Vin				T				
AVIn models: 150mA Slow-Blow Type		PROTECTION						
INTERNAL POWER DISSIPATION VOLTAGE ACCURACY 12.0% RATED POWER 1W RIPPLE & NOISE Note.2 75mVp-p LINE REGULATION Note.5 1.2% for 1% input variation LOAD REGULATION NOTE.5 1.2% for 1% input variation			/ 1					
Name		INTERNAL POWER DISSIPATION	**					
Note		VOLTAGE ACCURACY	±2.0%					
LINE REGULATION Note.3 1.2% for 1% input variation		RATED POWER	1W					
LINE REQUIATION Notes 1.2% for 1% input variation		RIPPLE & NOISE Note.2	75mVp-p					
SWITCHING FREQUENCY (Typ.) 100KHz SHORT CIRCUIT SIANDARY ODIONAL SHORT CIRCUIT COOLING Free-air convection WORKING TEMP. CASE TEMPERATURE WORKING HUMIDITY 55 ~ +125°C, 10 ~ 95% RH non-condensing TEMP. COEFFICIENT SOLDERING TEMPRATURE VIBRATION 10 - 500Hz, 26 10min./1cycle, period for 60min. each along X, Y, Z axes SAFETY SANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE ISOLATION RESISTANCE ISOLATION RESISTANCE IMP-O/P:100M Ohms / 500VDC / 25°C / 70% RH BOLATION RESISTANCE EMC EMISSION EMC EMISSION A Radiated EMS SOSSOZICISPR32) Class B Parameter Standard Test Level / Note (Note.6) Radiated ENS5032(CISPR32) Class B Parameter Standard Test Level 2, 3V/m Radiated Susceptibility ENG1000-4-2 Level 3, 3, 28/W air Radiated Susceptibility ENG1000-4-3 Level 2, 3V/m Radiated ENS1000-4-4 Level 3, 3W/m FET/Burest EMC (Note.5 felid ENS1000-4-8 Level 2, 3V/m BOTHERS MTBF BIMENSION (L'W'H) 1.54*10.7*7.1mm (0.6*04.2**0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.41 parameter are specified at normal input(L.5Vdc, M.12Vdc), rated load, 25°C 70% RH ambient. 2.Rippie & noise are measured at 20MHz by using a 12* twisted pair terminated with a 0.1µf & 47µf capacitor. 3.Line regulation is measured from 10% in 10% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)	OUTPUT							
SWITCHING FREQUENCY (Typ.) 100KHz			·					
Standard model: 0.5 second max. Optional models (SC-suffix): Continuous								
COOLING Free-air convection								
WORKING TEMP. Standard model: -40 ~ +90°C (Refer to "Derating Curve"); Optional models (SC-suffix): -40 ~ +105°C	PROTECTION	SHORT CIRCUIT	ABT CIRCUIT					
ENVIRONMENT CASE TEMPERATURE +100°C max.		COOLING						
WORKING HUMIDITY 20% - 90% RH non-condensing		WORKING TEMP.	Standard model: -40 ~ +90°C (Refer to "Derating Curve") ; Optional models (SC-suffix): -40 ~ +105°C					
STORAGE TEMP, HUMIDITY -55 ~ +125°C, 10 ~ 95% RH non-condensing		CASE TEMPERATURE	+100°C max.					
TEMP. COEFFICIENT 0.03% / °C (0 ~ 85°C)		WORKING HUMIDITY	20% ~ 90% RH non-condensing					
SOLDERING TEMPERATURE 1.5mm from case of 1 ~ 10sec./240°C max.	ENVIRONMENT	STORAGE TEMP., HUMIDITY	-					
VIBRATION		TEMP. COEFFICIENT	0.03% / °C (0 ~ 85°C)					
SAFETY STANDARDS		SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 10sec./240°C max.					
WITHSTAND VOLTAGE I/P-O/P:3KVDC ISOLATION RESISTANCE I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH		VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
ISOLATION RESISTANCE I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH		SAFETY STANDARDS						
ISOLATION CAPACITANCE (Typ.) 80pF		WITHSTAND VOLTAGE						
Parameter Standard Test Level / Note (Note.6)		ISOLATION RESISTANCE						
EMC EMISSION Conducted EN55032(CISPR32) N/A		ISOLATION CAPACITANCE (Typ.)	80pF					
Radiated EN55032(CISPR32) Class B EMC (Note.5,6) EMC IMMUNITY EMC IMM			Parameter	Standard	Test Level / Note(Note.6)			
EMC IMMUNITY E		EMC EMISSION	Conducted	EN55032(CISPR32)	N/A			
EMC IMMUNITY ESD EN61000-4-2 Level 3, ±8KV air	SAFETY &		Radiated	EN55032(CISPR32)	Class B			
ESD EN61000-4-2 Level 3, ±8KV air Radiated Susceptibility EN61000-4-3 Level 2, 3V/m EFT/Burest EN61000-4-4 Level 1, 0.5KV Surge EN61000-4-5 Level 2, 0.5KV Line-Line Conducted EN61000-4-6 Level 2, 3V Magnetic Field EN61000-4-8 Level 1, 1A/m MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)		EMC IMMUNITY	Parameter	Standard	Test Level / Note			
EMC IMMUNITY EFT/Burest EN61000-4-4 Level 1, 0.5KV Surge EN61000-4-5 Level 2, 0.5KV Line-Line Conducted EN61000-4-6 Level 2, 3V Magnetic Field EN61000-4-8 Level 1, 1A/m MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)			ESD	EN61000-4-2	Level 3, ±8KV air			
Surge EN61000-4-5 Level 2, 0.5KV Line-Line Conducted EN61000-4-6 Level 2, 3V Magnetic Field EN61000-4-8 Level 1, 1A/m MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)			Radiated Susceptibility	EN61000-4-3	Level 2, 3V/m			
Surge EN61000-4-5 Level 2, 0.5KV Line-Line Conducted EN61000-4-6 Level 2, 3V Magnetic Field EN61000-4-8 Level 1, 1A/m MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)			EFT/Burest	EN61000-4-4	Level 1, 0.5KV			
MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies."(as available on http://www.meanwell.com)			Surge	EN61000-4-5	Level 2, 0.5KV Line-Line			
MTBF 880Khrs min. MIL-HDBK-217F(25°C) DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)			Conducted	EN61000-4-6	Level 2, 3V			
OTHERS DIMENSION (L*W*H) 15.24*10.7*7.1mm (0.6*0.42*0.28 inch) CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g 1.All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5.The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies."(as available on http://www.meanwell.com)			Magnetic Field	EN61000-4-8	Level 1, 1A/m			
OTHERS CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1. All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5. The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)		MTBF	880Khrs min. MIL-HDBK-217F(25°C)				
OTHERS CASE MATERIAL Non-Conductive black plastic (UL 94V-0 rated) PACKING 1.2g NOTE 1. All parameters are specified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), 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 10% to 100% rated load. 5. The final equipment must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)	OTHERS	DIMENSION (L*W*H)						
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The filter capacitor Power Mate suggest: 470µF/100V.	NOTE	Ripple & noise are mea Line regulation is measu Load regulation is measu The final equipment murefer to "EMI testing of a call the	measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor. measured from low line to high line at rated load. measured from 10% to 100% rated load. nt must be re-confirm that it still meet EMC directives. For guidance on how to perform these EMC tests, please g of component power supplies."(as available on http://www.meanwell.com) ilter capacitor is required if the module has to meet EN61000-4-4, EN61000-4-5.					

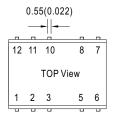


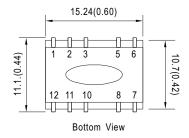
■ Mechanical Specification

- All dimensions in mm(inch)
- Tolerance:x.x±0.5mm(x.xx±0.02") $x.xx\pm0.25mm(x.xxx\pm0.01")$
- Pin size is 0.50x0.30mm (0.02" x0.01")
 Pin is Tolerance:x.xx±0.07mm(x.xxx±0.03")





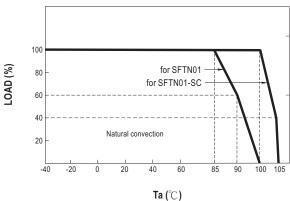




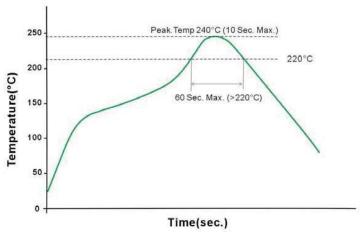
■ Plug Assignment

Pin No.	Pin-Out
1	-Vin
2	+Vin
5	-Vout
8	+Vout
3,6,7,10,11,12	N.C.

■ Derating Curve



■ Reflow Soldering Curve



Remark: The curve applies only to the hot air reflow soldering.

■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html