

**Features**

- 6WATT SIP PACKAGE
- 4:1 WIDE INPUT VOLTAGES
- EFFICIENCY TO 86%
- 100% BURNED IN
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- REGULATED OUTPUT TYPES



**6 Watt DC/DC  
Converter**

WIDE INPUT VOLTAGE RANGE

6 WATT DC-DC CONVERTER

**Input Specifications**

Input Voltage	:48Vdc	
Input Voltage Range	:18-75Vdc	
Surge Voltage (1S. max.)	:80Vdc	
Input current	:145mA TYP	@Vin=48Vdc, Io=500mA

**Output Specifications**

Output Voltage	:12Vdc	
Output Voltage Accuracy	:±2%	@Vout=11.76-12.24Vdc@Vin=18-75Vdc
Output Current	:500mA	
Efficiency	:86% TYP	@Vin=48Vdc, Io=500mA
Capacitive Load MAX	:330uF	
Ripple / Noise	:150mVp-p MAX	@20MHz Bandwidth
Short Circuit Protection	:Continuous	@Automatics recovery
Line Regulation	:±1.0% MAX	@ LL to HL at Full Load
Load Regulation	:±1.5% MAX	@0% to 100%FL

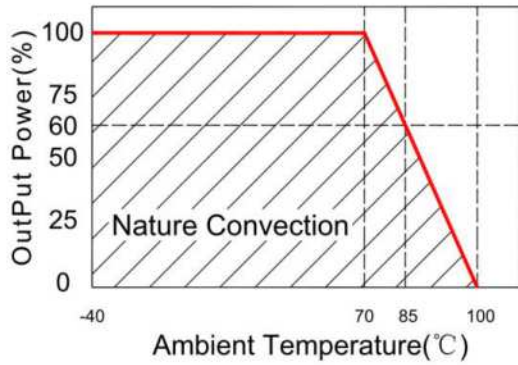
**General Specifications**

Operating Temperature Range	:-40°C ~ +85°C	
Storage Temperature	:-40°C ~ +100°C	
Switching Frequency	:330KHz TYP	
Humidity	:95% MAX	
Isolation Voltage	:1600Vdc	@Input to Output ( 60sec/0.5mA )
Isolation Resistance	:1000MΩ MIN	@ 500Vdc
Cooling	:Free air convection	
MTBF	:>1500000 Hours	MIL-HDBK-217F@25°C, Ground Benign.
Case Material	:DAP	
Weight	:4.5g TYP	
<b>Remote Control:</b>		
Turn On	: 0 ~ 0.8Vdc or open circuit	
Turn Off	: 2.5 ~ 12Vdc	

**Note.** Ripple and noise are measured using a 20 MHz bandwidth, measured using 1uF capacitors, and output at full load

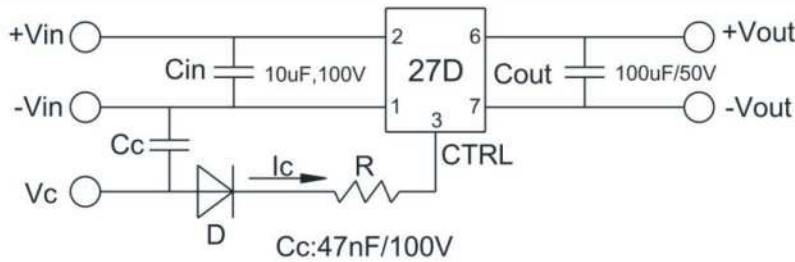
Temperature Derating Graph

Part Number



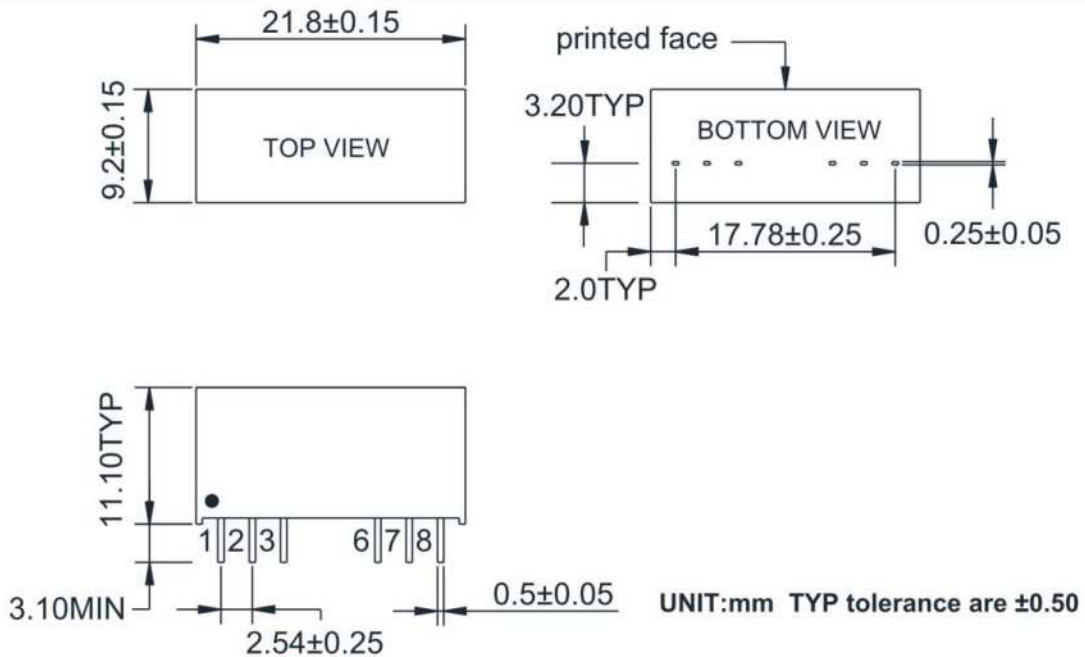
27DC - 48 S 12 R 6  
 A B C D E F  
 A:Series  
 B:Input Voltage  
 C:Single Output  
 D:Output Voltage  
 E:Regulated(R)  
 F:Output Power

Recommended Test Circuit



1. When open or high impedance, the converter works well; When this pin is 'high', the converter shut down. It should be note that the input current should be between 5-10mA, exceeding the maximum 20mA will cause permanent damage to the converter.
2. To make sure the product work at perfect operation status with full loading external capacitor is necessary and it is recommended to use high frequency low resistance electrolytic capacitor.

Outline Dimensions



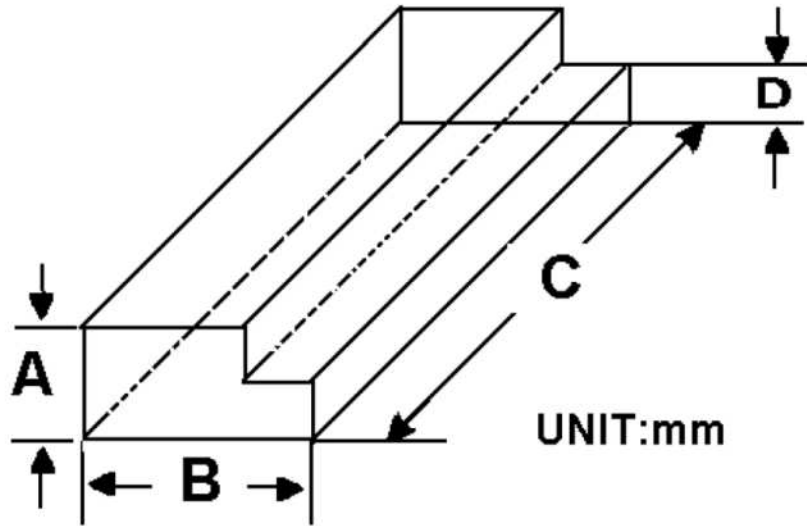
PIN	1	2	3	6	7	8
Single	-Vin	+Vin	Ctrl-Control input can (can be left open)	+Vout	-Vout	NC

**Packing Information:**

Weight----- 4.5grams/pcs

TUBE-----22pcs

Weight: 134.5g per tube



Size(mm)			
A	B	C	D
12.0	28.55	550	6.00

Outer carton unit: 1760pcs/80Tube/box

Weight: 11.8kg per carton

