

**Features**

- 6WATT SIP PACKAGE
- 4:1 WIDE INPUT VOLTAGES
- EFFICIENCY TO 78%
- 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            | :141mA TYP | @Vin=48Vdc,Io=1600mA |

**Output Specifications**

|                          |               |                                   |
|--------------------------|---------------|-----------------------------------|
| Output Voltage           | :3.3Vdc       |                                   |
| Output Voltage Accuracy  | :±2%          | @Vout=3.234-3.366Vdc@Vin=18-75Vdc |
| Output Current           | :1600mA       |                                   |
| Efficiency               | :78% TYP      | @Vin=48Vdc,Io=1600mA              |
| Capacitive Load MAX      | :1200uF       |                                   |
| 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                     |

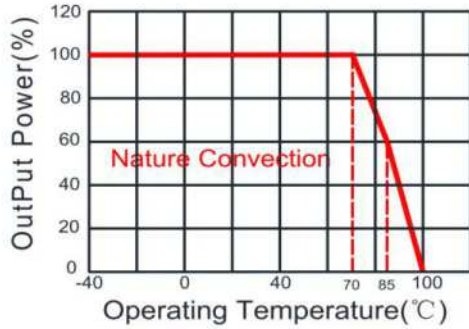
**General Specifications**

|                             |                              |                                   |
|-----------------------------|------------------------------|-----------------------------------|
| 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

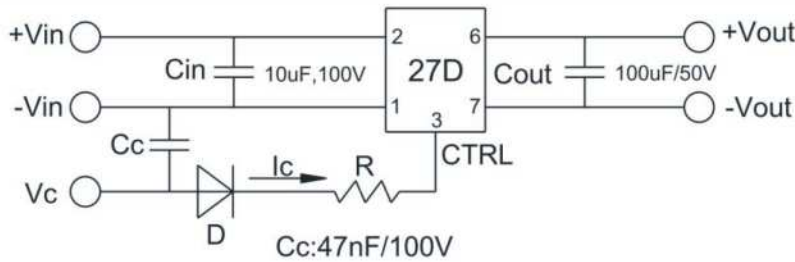
Temperature Derating Graph

Part Number



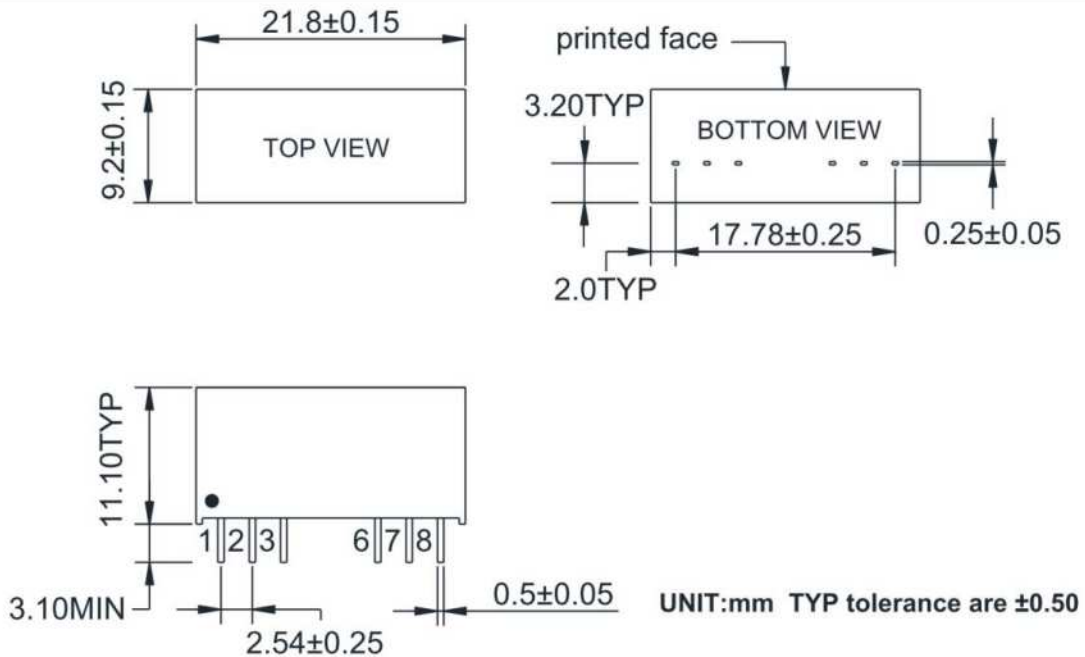
27DC - 48 S 03 R 6  
 A B C D E F  
 A:Series  
 B:Input Voltage  
 C:Single Output  
 D:Output Voltage  
 E:Regulated(R)  
 F:Output Power

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



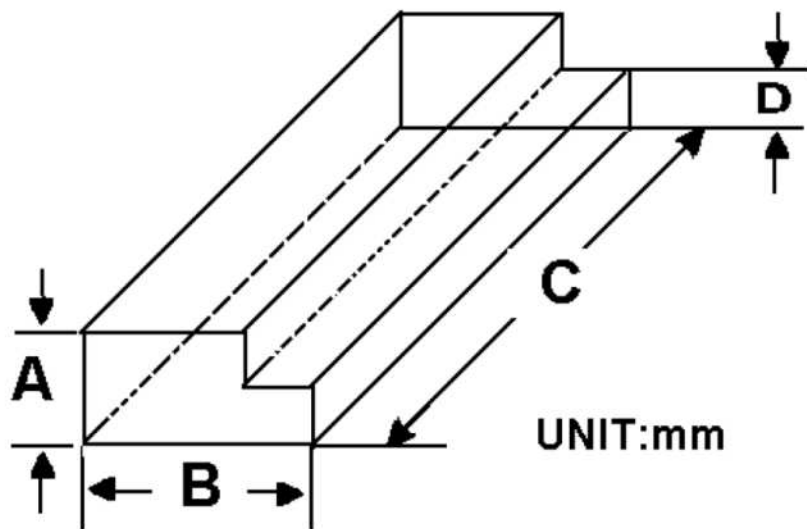
| PIN    | 1    | 2    | 3    | 6     | 7     | 8  |
|--------|------|------|------|-------|-------|----|
| Single | -Vin | +Vin | Ctrl | +Vout | -Vout | NC |

**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

