

**Features**

- 2WATT SIP PACKAGE
- 2:1 WIDE INPUT VOLTAGES
- EFFICIENCY TO 70%
- 100% BURNED IN
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- REGULATED OUTPUT TYPES



**2 Watt DC/DC  
Converter**

WIDE INPUT VOLTAGE RANGE

2 WATT DC-DC CONVERTER

**Input Specifications**

|                     |           |
|---------------------|-----------|
| Input Voltage       | :48Vdc    |
| Input Voltage Range | :36-75Vdc |

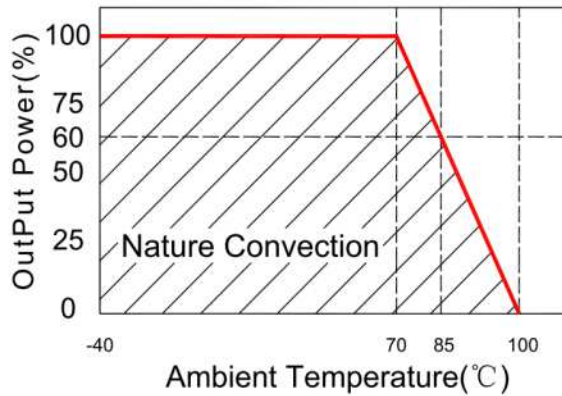
**Output Specifications**

|                          |                   |                                 |
|--------------------------|-------------------|---------------------------------|
| Output Voltage           | :5Vdc             |                                 |
| Output Voltage Accuracy  | : $\pm 3\%$       | @Vout=4.85-5.15Vdc@Vin=36-75Vdc |
| Output Current           | :400mA            |                                 |
| Efficiency               | :70% TYP          |                                 |
| Ripple / Noise           | :100mVp-p MAX     | @20MHz Bandwidth                |
| Short Circuit Protection | :Continuous       | @Automatics recovery            |
| Line Regulation          | : $\pm 0.5\%$ MAX | @ LL to HL at Full Load         |
| Load Regulation          | : $\pm 0.8\%$ MAX | @0% to 100%FL                   |

**General Specifications**

|                             |                                                   |                                   |
|-----------------------------|---------------------------------------------------|-----------------------------------|
| Operating Temperature Range | : $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  |                                   |
| Storage Temperature         | : $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ |                                   |
| Switching Frequency         | :200KHz TYP                                       |                                   |
| Humidity                    | :95% MAX                                          |                                   |
| Isolation Voltage           | :3000Vdc                                          | @Input to Output ( 60sec/0.5mA )  |
| Isolation Resistance        | :1000M $\Omega$ 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                                     |                                   |

## Temperature Derating Graph

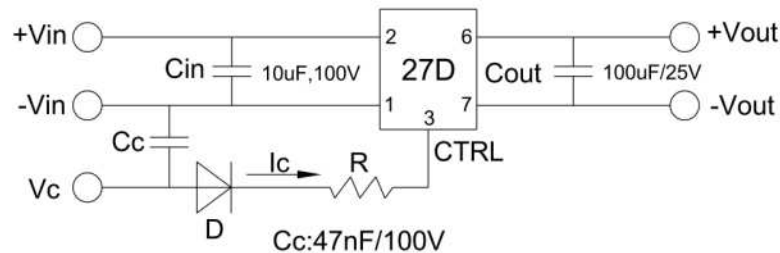


## Part Number

27D - 48 S 05 R 3KV  
A B C D E F

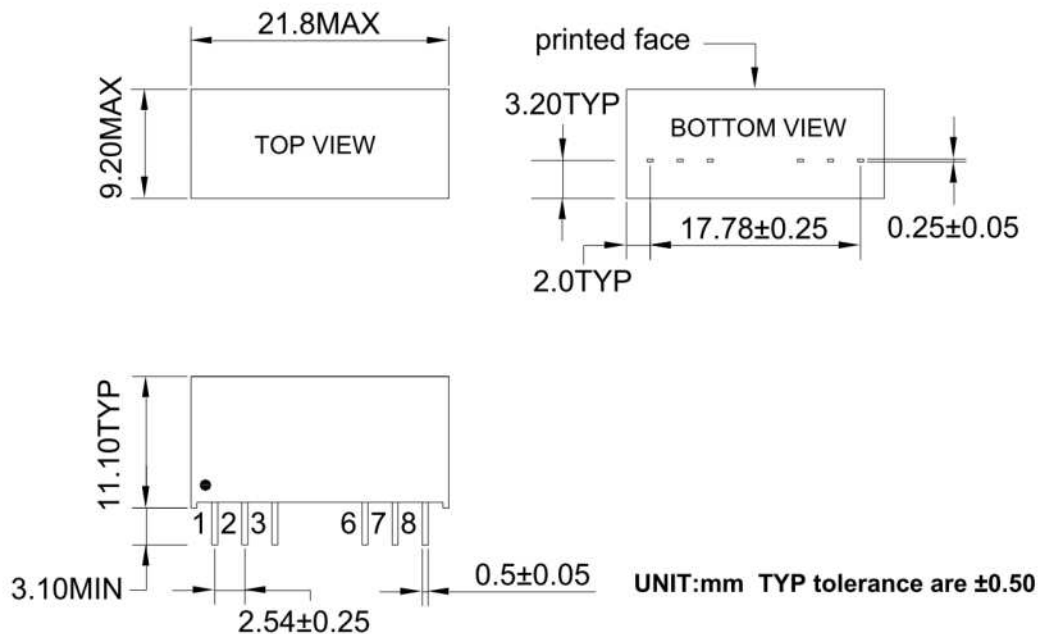
A:Series  
B:Input Voltage  
C:Single Output  
D:Output Voltage  
E:Regulated(R)  
F:Isolation Voltage

## 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



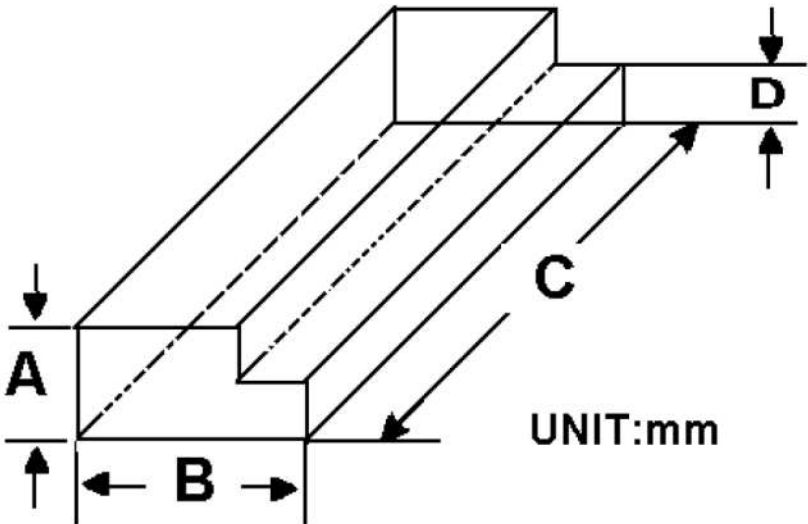
| PIN    | 1    | 2    | 3    | 6     | 7     | 8  |
|--------|------|------|------|-------|-------|----|
| Single | -Vin | +Vin | Ctrl | +Vout | -Vout | NC |

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

