

## FEATURES :

- 9W SIP8 Package
- 4:1 Wide Input Voltages Range
- High Efficiency up to 89%
- Customized Solutions Available
- Remote Control: On/Off
- Operating Temperature: -40°C TO +75°C
- UL94V-0 Package Material
- EMC Standard of EMI EN55032:2012+AC:2013 (Class B) Approved
- EMC Standard of EMS EN55024:2010 Approved
- 3 Years Warranty

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

| Part Number   | Input Voltage Range | Input Current    |                    | Output Voltage Range | Output Current | Efficiency |
|---------------|---------------------|------------------|--------------------|----------------------|----------------|------------|
|               | Vdc                 | No Load (mA TYP) | Full Load (mA TYP) | Vdc                  | mA             | %TYP       |
| 27DW-24S03R9W | 9-36                | 7                | 335                | 3.3                  | 2000           | 82         |
| 27DW-24S05R9W | 9-36                | 7                | 392                | 5                    | 1600           | 85         |
| 27DW-24S12R9W | 9-36                | 7                | 426                | 12                   | 750            | 88         |
| 27DW-24S15R9W | 9-36                | 7                | 426                | 15                   | 600            | 88         |
| 27DW-24S24R9W | 9-36                | 7                | 421                | 24                   | 375            | 89         |
| 27DW-48S03R9W | 18-75               | 7                | 168                | 3.3                  | 2000           | 82         |
| 27DW-48S05R9W | 18-75               | 7                | 196                | 5                    | 1600           | 85         |
| 27DW-48S12R9W | 18-75               | 7                | 213                | 12                   | 750            | 88         |
| 27DW-48S15R9W | 18-75               | 7                | 213                | 15                   | 600            | 88         |
| 27DW-48S24R9W | 18-75               | 7                | 211                | 24                   | 375            | 89         |
| 27DW-24D05R9W | 9-36                | 7                | 388                | ±5                   | ±800           | 86         |
| 27DW-24D12R9W | 9-36                | 7                | 426                | ±12                  | ±375           | 88         |
| 27DW-24D15R9W | 9-36                | 7                | 426                | ±15                  | ±300           | 88         |
| 27DW-48D05R9W | 18-75               | 7                | 196                | ±5                   | ±800           | 85         |
| 27DW-48D12R9W | 18-75               | 7                | 213                | ±12                  | ±375           | 88         |
| 27DW-48D15R9W | 18-75               | 7                | 216                | ±15                  | ±300           | 87         |

## Input Specifications

| Parameters    | Conditions | Min | Typ | Max | Units |
|---------------|------------|-----|-----|-----|-------|
| Voltage Types | Vo, Io Nom |     |     | 4:1 |       |
| Filter        | Capacitor  |     |     |     |       |

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DC-DC Converter

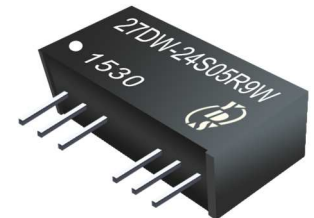
27DW-9W SERIES

9Watt 1.6KV Isolated

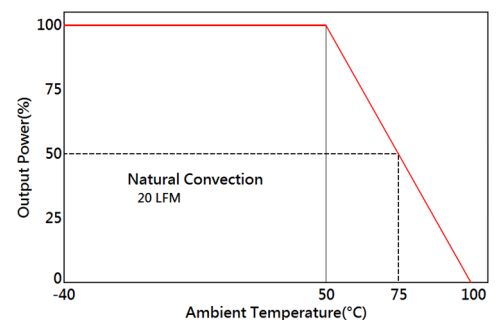
4 : 1 Input Voltage Range

Single &amp; Dual Output

SIP8



## Temperature Derating Graph



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Rev:1.0 2018/12/17

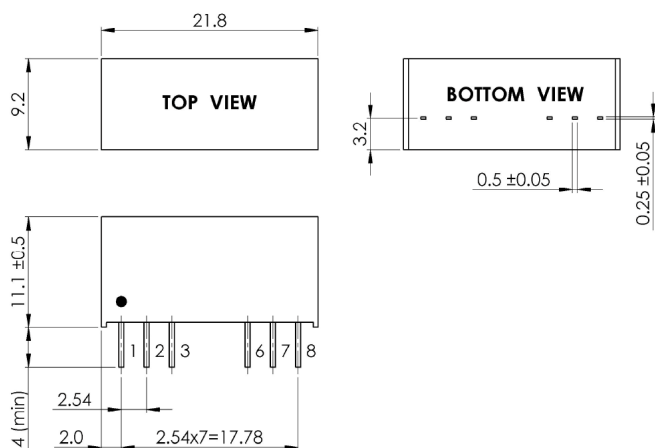
## Output Specifications

| Parameters                      | Conditions                                 | Min          | Typ        | Max          | Units |
|---------------------------------|--------------------------------------------|--------------|------------|--------------|-------|
| Voltage Tolerance               | 100% full load                             |              |            | ±2           | %     |
| Short Circuit Protection        | Continuous, Auto-Recovery                  |              |            |              |       |
| Line Regulation                 |                                            | -0.5         |            | +0.5         | %     |
| Load Regulation                 | Single output models<br>Dual output models | -0.5<br>-5.0 |            | +0.5<br>+5.0 | %     |
| Ripple & Noise                  | Output:3-10V TYPES<br>BW=DC To 20MHz       |              |            | 100          | mVp-p |
|                                 | Output > 10V TYPES<br>BW=DC To 20MHz       |              | 1% of Vout |              | mVp-p |
| Transient response setting time | 25% load step change                       |              | 250        |              | us    |

## General Specifications

| Parameters                                     | Conditions                 | Min                     | Typ        | Max | Units |
|------------------------------------------------|----------------------------|-------------------------|------------|-----|-------|
| Isolation Voltage                              |                            |                         | 1600       |     | Vdc   |
| Isolation Resistance                           | 500Vdc                     | 1000                    |            |     | MΩ    |
| Switching Frequency (Full load, nominal input) | Single<br>Dual             |                         | 400<br>500 |     | KHz   |
| Operating Temperature                          | With derating              | -40                     |            | 75  | °C    |
| Storage Temperature                            |                            | -55                     |            | 125 | °C    |
| Humidity                                       | Non Condensing             |                         |            | 95  | %     |
| Cooling                                        | Natural Convection (20LFM) |                         |            |     |       |
| Case material                                  | Plastic                    |                         |            |     |       |
| MTBF                                           | MIL-HDBK-217F@25°C         | 2.696 x 10 <sup>6</sup> |            |     | Hours |
| Weight                                         |                            |                         | 4.8        |     | g     |
| Dimensions                                     |                            | 21.8X9.2X11.1           |            |     | mm    |

## Dimensions



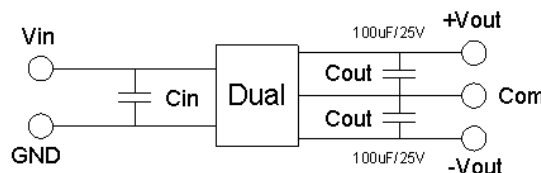
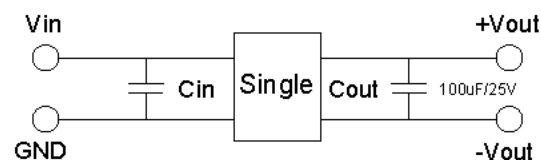
Unit : mm  
Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

## Part Number

|      |   |    |   |    |   |    |
|------|---|----|---|----|---|----|
| 27DW | - | 24 | S | 05 | R | 9W |
| A    |   | B  | C | D  | E | F  |

- A : Series  
B : Input Voltage  
C : Single(S);Dual(D)  
D : Output Voltage  
E : Regulated(R)  
F : Watt

## Recommended Test Circuit



## PIN Assignment

| Pin    | 1    | 2    | 3             | 6     | 7     | 8     |
|--------|------|------|---------------|-------|-------|-------|
| Single | -Vin | +Vin | Remote ON/OFF | +Vout | -Vout | NC    |
| Dual   | -Vin | +Vin | Remote ON/OFF | +Vout | Com   | -Vout |