

## FEATURES:

- 6 Watt SIP8 package
- 2:1 Wide Input Voltages Range
- 100% Burned In
- High Efficiency up to 86%
- Customized Solutions Available
- Remote Control: On/Off
- UL94V-0 Package Material
- UL Recognized
- RoHS Compliant

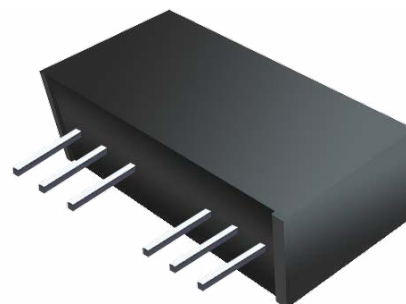
Specifications typical at TA=25°C nominal input voltage and rated output current unless otherwise specified

| Part Number | Input Voltage Range | Input Current (mA TYP) |           | Output Voltage Range | Output Current | Efficiency |
|-------------|---------------------|------------------------|-----------|----------------------|----------------|------------|
|             | Vdc                 | No Load                | Full Load | Vdc                  | mA             | %TYP       |
| RD7-24S036R | 18~36               | 7                      | 255       | 3.3                  | 1500           | 81         |
| RD7-24S056R | 18~36               | 7                      | 301       | 5                    | 1200           | 83         |
| RD7-24S126R | 18~36               | 7                      | 294       | 12                   | 500            | 85         |
| RD7-24S156R | 18~36               | 7                      | 291       | 15                   | 400            | 86         |
| RD7-24S246R | 18~36               | 7                      | 294       | 24                   | 250            | 85         |
| RD7-12D126R | 9~18                | 5                      | 602       | ±12                  | ±250           | 83         |
| RD7-24D156R | 18~36               | 7                      | 298       | ±15                  | ±200           | 84         |

# ADAM TECH

## DC-DC Converter RD7-6W Series

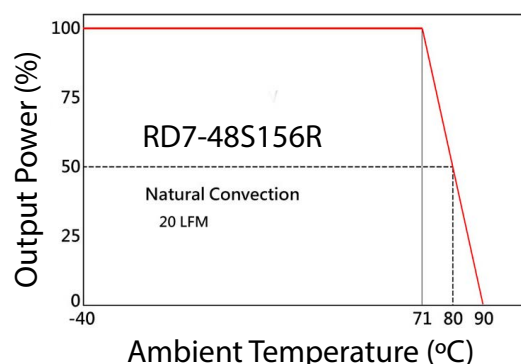
6 Watt 1.5KV Isolated  
2:1 Input Voltage Range  
Single & Dual Output  
SIP8



### Input Specifications

| Parameters    | Conditions | Min | Typ | Max | Units |
|---------------|------------|-----|-----|-----|-------|
| Voltage Types | Vo, Io Nom |     |     | 2:1 |       |
| Filter        | Capacitor  |     |     |     |       |

### Temperature Derating Graph



## Output Specifications

| Parameters                         | Conditions                                                   | Min          | Typ | Max           | Units |
|------------------------------------|--------------------------------------------------------------|--------------|-----|---------------|-------|
| Voltage Tolerance                  | 100% full load                                               |              |     | ±2            | %     |
| Short Circuit Protection           | Continuous,<br>Auto-Recovery                                 |              |     |               |       |
| Line Regulation                    |                                                              | -0.5         |     | +0.5          | %     |
| Load Regulation                    | Single output models<br>Dual output models<br>(Balance Load) | -0.5<br>-1.0 |     | +0.5<br>+1.0  | %     |
| Ripple & Noise                     | Output:3V-10V TYPES<br>BW=DC To 20MHz                        |              |     | 100           | mVp-p |
|                                    | Output:>10V TYPES<br>BW=DC To 20MHz                          |              |     | 1% of<br>Vout | mVp-p |
| Transient Response Setting<br>Time | 25% load step change                                         |              | 250 |               | us    |

## Part Number

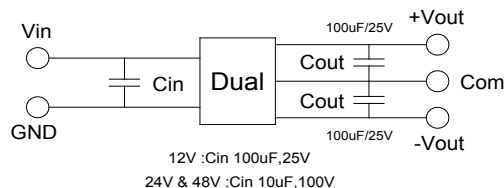
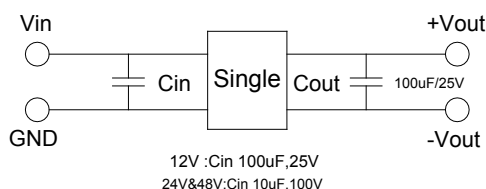
RD7 - XX X XX X X X  
A B C D E F G

A: Series  
B: Input Voltage  
C: Single (S) / Dual Output (D)  
D: Output Voltage  
E: Output Power  
F: Regulated (R)  
G: Isolation Voltage

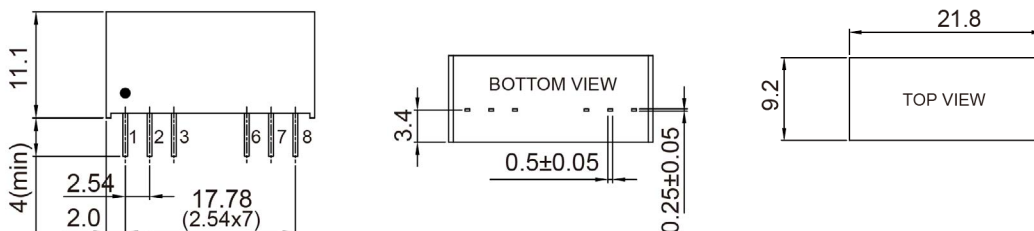
## General Specifications

| Parameters            | Conditions                 | Min       | Typ           | Max  | Units |
|-----------------------|----------------------------|-----------|---------------|------|-------|
| Isolation Voltage     |                            |           | 1500          |      | Vdc   |
| Isolation Resistance  | 500Vdc                     | 1000      |               |      | MΩ    |
| Switching Frequency   | Single<br>Dual             |           | 400<br>500    |      | KHz   |
| Operating Temperature |                            | -40       |               | +85  | °C    |
| Storage Temperature   |                            | -55       |               | +125 | °C    |
| Humidity              | Non Condensing             |           |               | 95   | %     |
| Cooling               | Natural Convection (20LFM) |           |               |      |       |
| Case Material         | DAP                        |           |               |      |       |
| MTBF                  | MIL-HDBK-217F@25°C         | 1,500,000 |               |      | Hours |
| Weight                |                            |           | 4.5           |      | g     |
| Dimensions            |                            |           | 21.8x9.2x11.1 |      | mm    |

## Recommended Test Circuit



## Dimensions



UNIT: mm tolerances are XX.X±0.5, XX.XX±0.25, the tolerance of Pin size is ±0.05

## PIN Connection

| 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 |