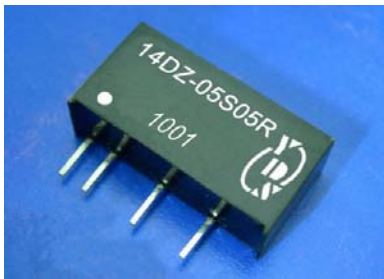




## 3000Vdc Isolation Single Output 1 Watt Dc-Dc Converter



### FEATURES:

- 2:1 Wide Input Voltages Range
- 7PIN SIP Package
- High Efficiency up to 80%
- Regulated Output Types
- Internal SMD Construction
- No External Component Required
- Operating Temperature: -40°C TO +85°C
- Industry Standard Pinout



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

| Part Number | Input Voltage Range | Output Voltage | Output Current | Efficiency |
|-------------|---------------------|----------------|----------------|------------|
|             | Vdc                 | Vdc            | mA             | %TYP       |
| 14DZ-05S05R | 4.5-9               | 5              | 200            | 65         |
| 14DZ-05S09R | 4.5-9               | 9              | 112            | 70         |
| 14DZ-05S12R | 4.5-9               | 12             | 84             | 70         |
| 14DZ-05S15R | 4.5-9               | 15             | 67             | 70         |
| 14DZ-05S24R | 4.5-9               | 24             | 42             | 75         |
| 14DZ-12S05R | 9-18                | 5              | 200            | 70         |
| 14DZ-12S09R | 9-18                | 9              | 112            | 72         |
| 14DZ-12S12R | 9-18                | 12             | 84             | 73         |
| 14DZ-12S15R | 9-18                | 15             | 67             | 75         |
| 14DZ-12S24R | 9-18                | 24             | 42             | 80         |
| 14DZ-24S05R | 18-36               | 5              | 200            | 75         |
| 14DZ-24S09R | 18-36               | 9              | 112            | 75         |
| 14DZ-24S12R | 18-36               | 12             | 84             | 78         |
| 14DZ-24S15R | 18-36               | 15             | 67             | 78         |
| 14DZ-24S24R | 18-36               | 24             | 42             | 80         |

### Input Specifications

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

### Output Specifications

| Parameters                      | Conditions                          | Min | Typ | Max        | Units |
|---------------------------------|-------------------------------------|-----|-----|------------|-------|
| Voltage Tolerance               | 100% full load                      |     |     | ±5         | %     |
| Short Circuit Protection        | Continuous                          |     |     |            |       |
| Line Regulation                 | Regulated                           |     |     | ±0.5       | %     |
| Load Regulation                 | Regulated                           |     |     | ±1.5       | %     |
| Ripple & Noise                  | Output: 5V, 9V TYPES BW=DC To 20MHz |     |     | 100        | mVp-p |
| Ripple & Noise                  | Output: 12-24V TYPES BW=DC To 20MHz |     |     | 1% of Vout | mVp-p |
| Transient response setting time | 50% load step change                |     | 350 |            | us    |

### General Specifications

| Parameters            | Conditions               | Min           | Typ | Max | Units |
|-----------------------|--------------------------|---------------|-----|-----|-------|
| Isolation Resistance  | 500Vdc                   | 1000          |     |     | MΩ    |
| Switching Frequency   | Full load, nominal input |               | 100 |     | KHz   |
| Operation Temperature |                          | -40           |     | +85 | °C    |
| Humidity              | Non Condensing           |               |     | 95  | %     |
| Cooling               | Free air Convection      |               |     |     |       |
| Case material         | DAP                      |               |     |     |       |
| MTBF                  | MIL-HDBK-217F@25°C       | 1500000       |     |     | Hours |
| Weight                |                          |               | 2.7 |     | g     |
| Dimensions            |                          | 19.5x7.1x10.0 |     |     | mm    |

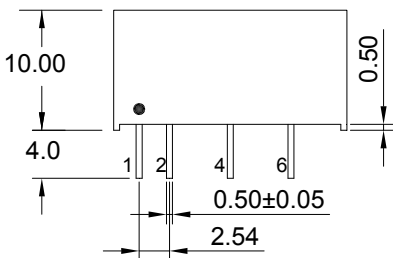
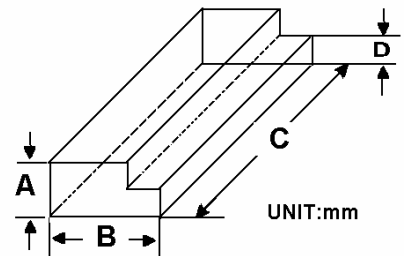
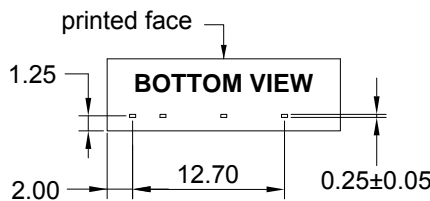
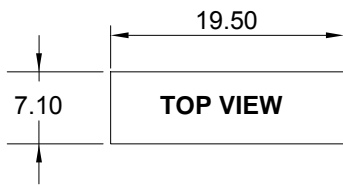


3000Vdc Isolation Single Output 1 Watt Dc-Dc Converter

| Temperature Derating Graph | Part Number   |
|----------------------------|---|
|                            | <p>14DZ - <u>05</u> <u>S</u> <u>05</u> <u>R</u></p> <p style="margin-left: 40px;">A      B      C      D      E</p> <p>A:Series<br/>B:Input Voltage<br/>C:Single Output<br/>D:Output Voltage<br/>E:Regulated(R)</p> |

| Recommended Test Circuit                 |
|--|
| <p>Cin: 10uF,100V<br/>Cout:100uF,50V</p> |

| Markings and dimensions | Packaging |
|-------------------------|-----------|
|-------------------------|-----------|



UNIT:mm Unless otherwise specified,all tolerances are ±0.25

| PIN Connection |      |      |       |       |
|----------------|------|------|-------|-------|
| PIN            | 1    | 2    | 4     | 6     |
| Single         | +Vin | -Vin | -Vout | +Vout |

| Size(mm) |      |     |     |
|----------|------|-----|-----|
| A        | B    | C   | D   |
| 9.5      | 16.5 | 522 | 5.0 |