

**FEATURES :**

- Up to 6 Watt Output Power
- 5 Pin Package
- Low Ripple and Noise
- Regulated Output Types
- 500Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C to +85°C

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

| Part Number   | Input Voltage | Output Voltage | Output Current | Efficiency |
|---------------|---------------|----------------|----------------|------------|
|               | Vdc           | Vdc            | mA             | %Typ       |
| 82D-05S05RNNL | 5             | 5              | 1200           | 60         |
| 82D-05S12RNNL | 5             | 12             | 500            | 65         |
| 82D-05D15RNNL | 5             | ±15            | ±200           | 65         |
| 82D-12S12RNNL | 12            | 12             | 500            | 65         |
| 82D-12S15RNNL | 12            | 15             | 400            | 65         |
| 82D-12D12RNNL | 12            | ±12            | ±250           | 65         |
| 82D-24S05RNNL | 24            | 5              | 1200           | 60         |
| 82D-24S15RNNL | 24            | 15             | 400            | 65         |
| 82D-24D12RNNL | 24            | ±12            | ±250           | 65         |
| 82D-48S15RNNL | 48            | 15             | 400            | 65         |
| 82D-48D12RNNL | 48            | ±12            | ±250           | 65         |
| 82D-48D15RNNL | 48            | ±15            | ±200           | 65         |

**Input Specifications**

| Parameters   | Conditions | Min | Typ | Max | Units |
|--------------|------------|-----|-----|-----|-------|
| Voltage Type |            |     |     | ±10 | %     |
| Filter       | Capacitor  |     |     |     |       |

**Output Specifications**

| Parameters                      | Conditions           | Min | Typ | Max  | Units |
|---------------------------------|----------------------|-----|-----|------|-------|
| Voltage Tolerance               |                      |     |     | ±5   | %     |
| Short Circuit Protection        | Continuous           |     |     |      |       |
| Line Regulation                 |                      |     |     | ±0.3 | %     |
| Load Regulation                 |                      |     |     | ±0.5 | %     |
| Ripple & Noise                  | BW=DC To 20MHz       |     |     | 50   | mVp-p |
| Transient response setting time | 50% load step change |     | 350 |      | us    |

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DC-DC Converter

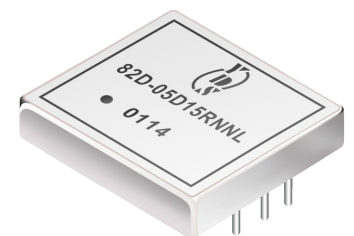
**82D SERIES**

6Watt

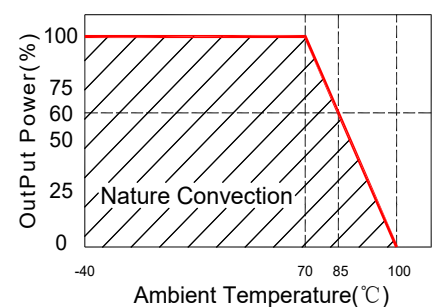
0.5KVDC Isolated

Single & Dual Output

DIL5



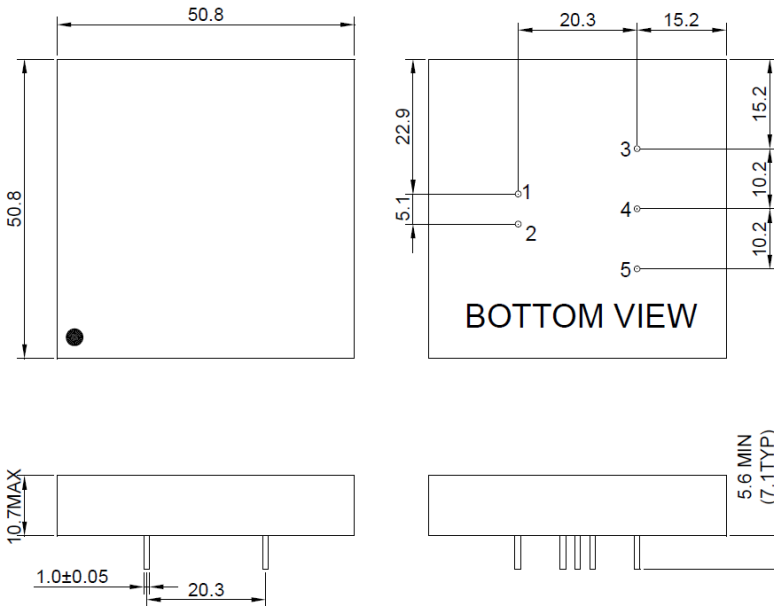
**Temperature Derating Graph**



**General Specifications**

| Parameters            | Conditions                             | Min            | Typ | Max | Units |
|-----------------------|--|----------------|-----|-----|-------|
| Isolation Resistance  | 500Vdc                                 | 1000           |     |     | MΩ    |
| Switching Frequency   |  |                | 50  |     | KHz   |
| Operating Temperature |  | -40            |     | +85 | °C    |
| Humidity              | Non Condensing                         |                |     | 95  | %     |
| Cooling               | Free air Convection                    |                |     |     |       |
| Case material         | Nickel Coated with Non-Conductive Base |                |     |     |       |
| Weight                |  |                | 57  |     | g     |
| Dimensions            |  | 50.8x50.8x10.7 |     |     | mm    |

**Markings and Dimensions**



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

**PIN Connection**

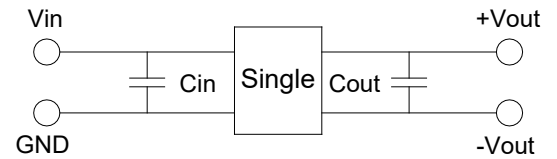
| PIN    | 1    | 2    | 3     | 4      | 5     |
|--------|------|------|-------|--------|-------|
| Single | +Vin | -Vin | +Vout | NO PIN | -Vout |
| Dual   | +Vin | -Vin | +Vout | COM    | -Vout |

**Part Number**

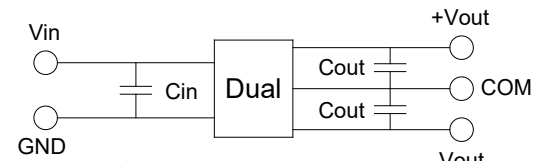
82D - 05 D 12 R N NL  
A B C D E F G

- A:Series
- B:Input Voltage
- C:Single(S) Dual(D)
- D:Output Voltage
- E:Regulated(R)
- F:Package
- G:RoHS Version

**Recommended Test Circuit**

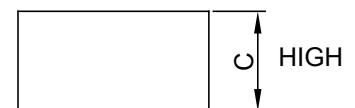
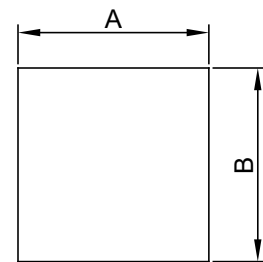


5V :Cin 4.7uF,25V 5V :Cout 10uF,25V  
12V :Cin 2.2uF,25V 12V:Cout 1uF,25V  
15V:Cin 1uF,50V 15V:Cout 0.47uF,50V  
24V:Cin 1uF,100V



5V :Cin 4.7uF,25V 12V:Cout 1uF,25V  
12V:Cin 2.2uF,25V 15V:Cout 0.47uF,50V  
24V:Cin 1uF,50V  
48V :Cin 1uF,100V

**Packaging**



| Size(mm) |       |       |
|----------|-------|-------|
| A        | B     | C     |
| 51.50    | 52.30 | 27.00 |

