

PV Series

Single Inline Package

DC-DC Converters (1-3 Watts)

- SIP Style Footprint
- 5V, 12V, 24V, & 48V Inputs
- Single and Dual Outputs
- Adjustable Output Voltages
- Input - Output Isolation

Key Market Segments & Applications

Telecom & Datacom
 Test and Measurement
 Point of Load

PV Features and Benefits

Features

- Single Inline Package (SIP)
- Wide Input Voltage Range
- Isolated Output
- Wide Operating Temperature Range

Benefits

- Uses Less PCB Area
- Accepts Unregulated Input Voltages
- Can Be Configured for + or - Outputs
- Supports Harsh Operating Environments

Specifications

| | | Output Volt. | | |
|---------------------------|-----|---|-------|---------|
| | | 3.3V | 5V | 12V |
| ITEMS | | | | |
| DC Input ranges | VDC | 5V: 4.5V-9V; 12V: 9V-18V, 24V: 18V-36V, 48V: 36V-72 | | |
| Efficiency (typical) | - | 77% | | |
| Output Voltage Accuracy | - | ±5% | | |
| Output Voltage Adjustment | VDC | 3.3V-3.67V | 5V-6V | 12V-15V |
| Preload | A | 0 | | |
| Ripple & Noise | mV | 100mV | 120mV | |
| Max Line Regulation | mV | 20mV | | |
| Max Load Regulation | mV | 40mV | | |
| Overcurrent Protection | A | Auto recovery (1) | | |
| Overvoltage Protection | % | None | | |
| Temperature Coefficient | - | 0.02%/°C | | |
| Cooling | - | Convection cooled | | |
| Isolation Voltage | VAC | Input-Output: 500VAC 1 min. (5mA) | | |
| Isolation Resistance | Ohm | Greater than 100M | | |
| Shock | - | 20G | | |
| Vibration | - | 10-55Hz (sweep for 1 min.) 1.5mm constant amplitude max 9G X,Y,Z 2 hours each | | |
| Humidity (non condensing) | - | 30%-90% RH (non condensing) | | |
| Storage Humidity | - | 10%-95% RH (non condensing) | | |
| Operating Temp. Range | - | -20 to 70°C, derate linearly to 50% load from 50 to 70°C | | |
| Storage Temperature | °C | -30°C to +85°C | | |
| Weight (Typ) | g | 5 | | |
| Size (LxWxH) | mm | 28.5x18x8.5(PV1R5); 33x18x8.5 (PV3) | | |
| Warranty | - | 2 years | | |

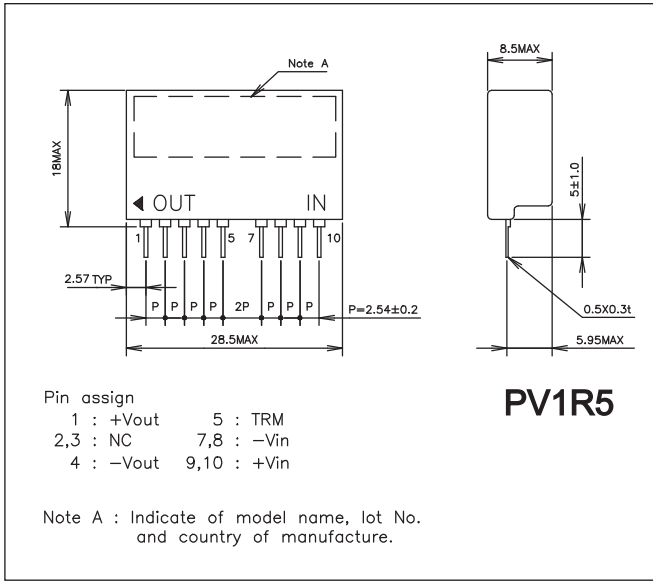
Note: See Installation Manual for full details, test methods of parameters and application notes

1) Avoid operation in short circuit or overload for more than 30 seconds

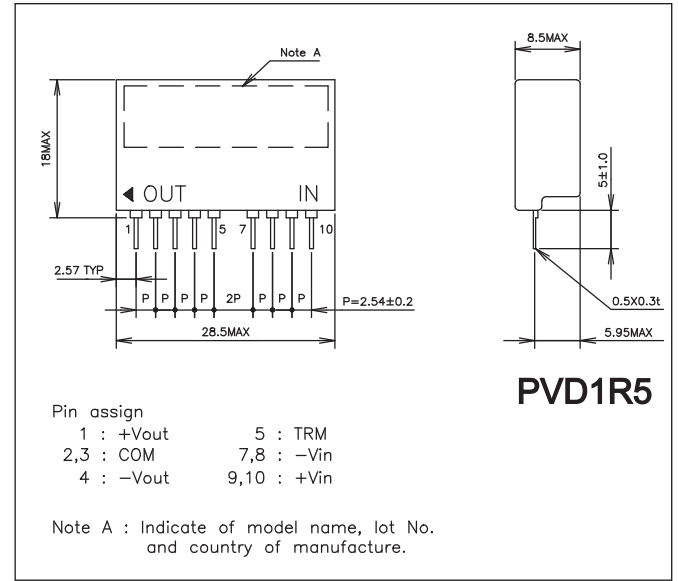
| Model Selector | | | | |
|----------------------|--------------------|--------------------|------------------|-------------------|
| Model | Output Voltage (V) | Output Current (A) | Output Power (W) | Input Voltage (V) |
| Single Output | | | | |
| PV1R5-5-3.3 | 3.3 | 0.4 | 1.3 | 5.0 |
| PV1R5-48-3.3 | 3.3 | 0.4 | 1.3 | 48.0 |
| PV3-5-3.3 | 3.3 | 0.6 | 2.0 | 5.0 |
| PV3-48-3.3 | 3.3 | 0.6 | 2.0 | 48.0 |
| PV1R5-5-5 | 5.0 | 0.3 | 1.5 | 5.0 |
| PV1R5-12-5 | 5.0 | 0.3 | 1.5 | 12.0 |
| PV1R5-24-5 | 5.0 | 0.3 | 1.5 | 24.0 |
| PV1R5-48-5 | 5.0 | 0.3 | 1.5 | 48.0 |
| PV3-5-5 | 5.0 | 0.6 | 3.0 | 5.0 |
| PV3-12-5 | 5.0 | 0.6 | 3.0 | 12.0 |
| PV3-24-5 | 5.0 | 0.6 | 3.0 | 24.0 |
| PV3-48-5 | 5.0 | 0.6 | 3.0 | 48.0 |
| PV1R5-5-12 | 12.0 | 0.125 | 1.5 | 5.0 |
| PV3-5-12 | 12.0 | 0.25 | 3.0 | 5.0 |
| Dual Outputs | | | | |
| PVD1R5-5-1212 | ±12.0 | 0.06 | 1.44 | 5.0 |
| PVD1R5-12-1212 | ±12.0 | 0.06 | 1.44 | 12.0 |
| PVD1R5-24-1212 | ±12.0 | 0.06 | 1.44 | 24.0 |
| PVD1R5-48-1212 | ±12.0 | 0.06 | 1.44 | 48.0 |
| PVD3-5-1212 | ±12.0 | 0.125 | 3.0 | 5.0 |
| PVD3-12-1212 | ±12.0 | 0.125 | 3.0 | 12.0 |
| PVD3-24-1212 | ±12.0 | 0.125 | 3.0 | 24.0 |
| PVD3-48-1212 | ±12.0 | 0.125 | 3.0 | 48.0 |

| PIN Assignments | |
|-----------------|--------------------------|
| Pin Description | Function |
| -Vin | Negative Input Terminal |
| +Vin | Positive Input Terminal |
| +Vout | Positive Output Terminal |
| -Vout | Negative Output Terminal |
| NC | No connection |
| COM | Common |
| TRM | Trim |

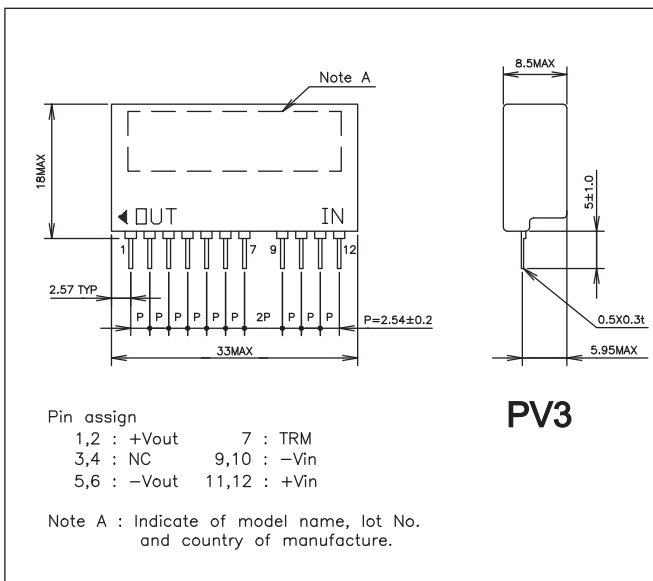
Outline Drawing PV1R5 Series



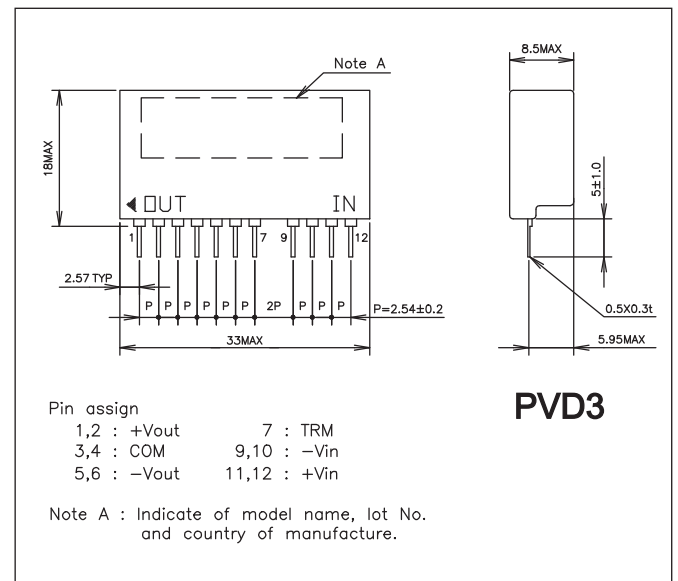
Outline Drawing PVD1R5 Series



Outline Drawing PV3 Series



Outline Drawing PVD3 Series



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