

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	

Last time buy March 2025

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

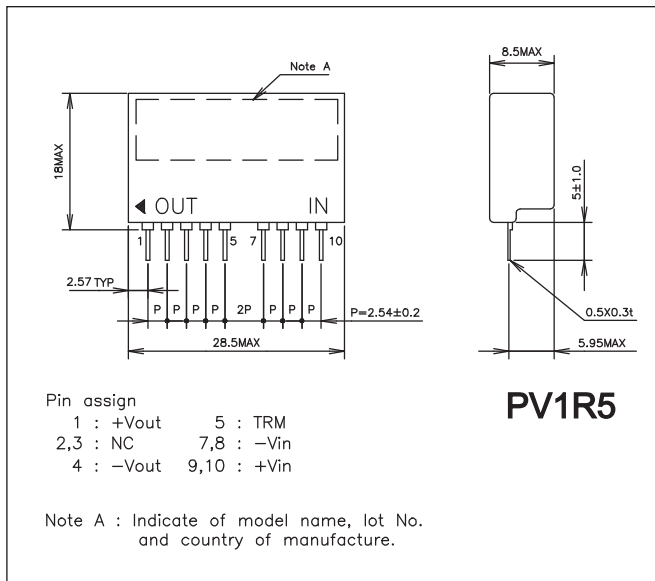
Model Selector

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

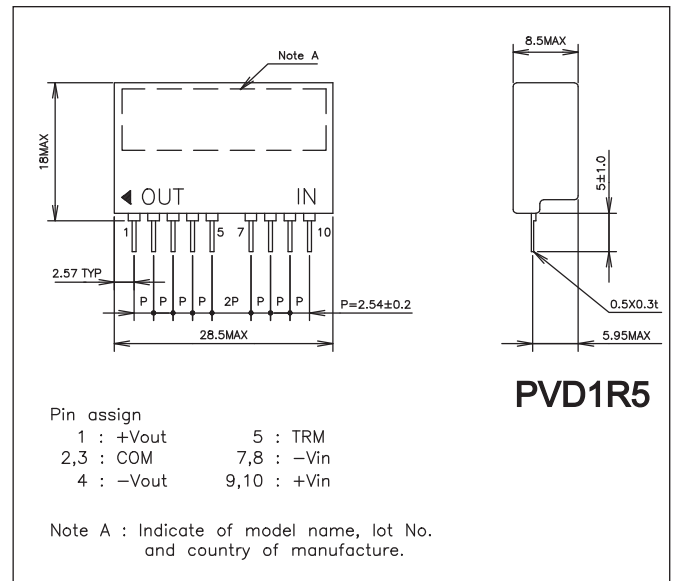
PIN Assignments

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

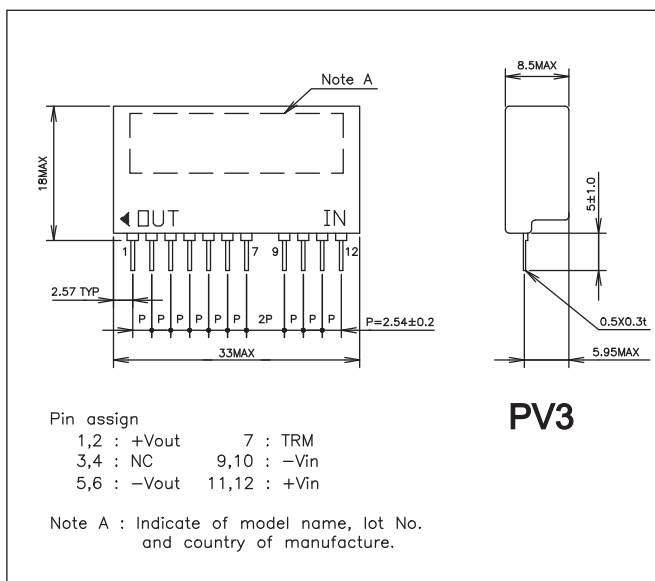
Outline Drawing PV1R5 Series



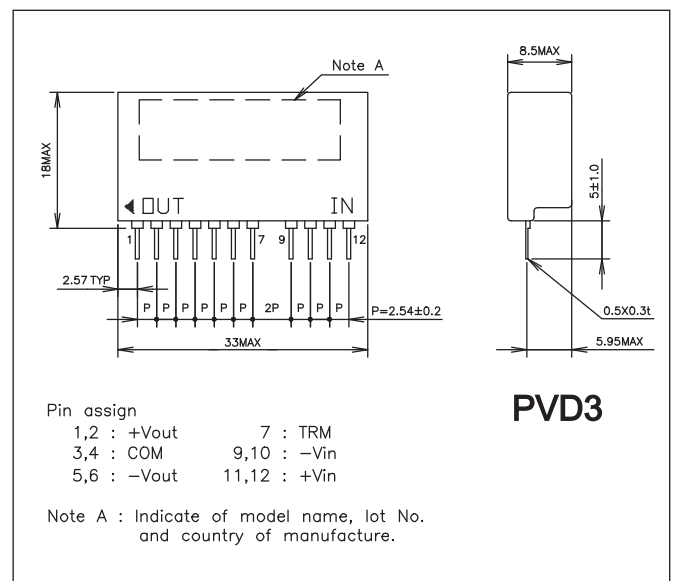
Outline Drawing PVD1R5 Series



Outline Drawing PV3 Series



Outline Drawing PVD3 Series





TDK-Lambda France SAS

Tel: +33 1 60 12 71 65
tlf.fr.powersolutions@tdk.com
www.emea.lambda.tdk.com/fr



Italy Sales Office

Tel: +39 02 61 29 38 63
tlf.it.powersolutions@tdk.com
www.emea.lambda.tdk.com/it



Netherlands

tlf.nl.powersolutions@tdk.com
www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Tel: +49 7841 666 0
tlg.powersolutions@tdk.com
www.emea.lambda.tdk.com/de



Austria Sales Office

Tel: +43 2256 655 84
tlg.at.powersolutions@tdk.com
www.emea.lambda.tdk.com/at



Switzerland Sales Office

Tel: +41 44 850 53 53
tlg.ch.powersolutions@tdk.com
www.emea.lambda.tdk.com/ch



Nordic Sales Office

Tel: +45 8853 8086
tlg.dk.powersolutions@tdk.com
www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66
tlu.powersolutions@tdk.com
www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel: +9 723 902 4333
tli.powersolutions@tdk.com
www.emea.lambda.tdk.com/il-en



TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324
tla.powersolutions@tdk.com
www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599
sales.br@tdk-electronics.tdk.com
www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation

Tel: +81-3-6778-1113
www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777
tlc.powersolutions@tdk.com
www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211
tts.marketing@tdk.com
www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660
mathew.philip@tdk.com
www.sg.lambda.tdk.com

