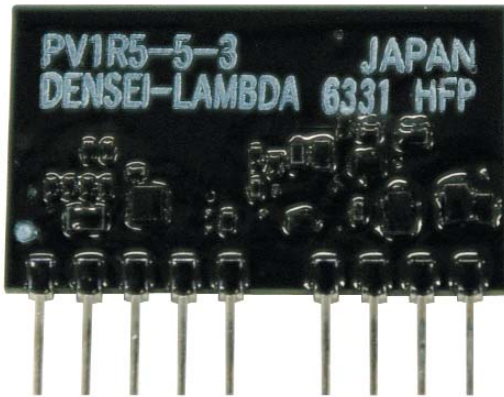


## Single Inline Package DC-DC Converters (1-3 Watts)



- ◆ SIP style footprint
- ◆ 5V, 12V, 24V, & 48V Inputs
- ◆ Single and Dual Outputs
- ◆ Adjustable Output Voltages
- ◆ Input-Output Isolation
- ◆ Overcurrent Protection

### Key Market Segments

Telecom & Datacom  
Test & Measurement  
Point of Load

### PV Features and Benefits

Feature	Benefit
◆ Single Inline Package (SIP)	◆ Uses less pcb area
◆ Wide input voltage range	◆ Accepts unregulated input voltages
◆ Isolated output	◆ Can be configured for + or - outputs
◆ Wide operating temperature range	◆ 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)	in		1.12x0.33x0.91(PV1R5); 1.29x0.33x1.29(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)
<b>Single Output</b>				
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
<b>Dual Outputs</b>				
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

## Pinout

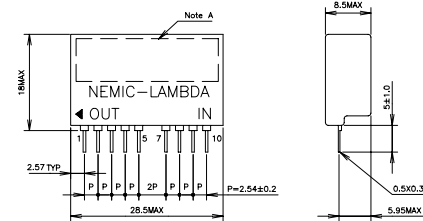
Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
+Vout	Positive Output Terminal
-Vout	Negative Output Terminal
NC	No connection
COM	Common
TRM	Trim

## Other Lambda DC-DC Products

X	10 - 20W, 24 & 48V input DC-DC converters
SX	Surface Mount 20W, 24 & 48V input DC-DC converters
PC	1.5 - 6W, 5V, 12V, 24V & 48V input DC-DC converters

For Additional Information, please visit  
[www.lambdapower.com/products/pv-series.htm](http://www.lambdapower.com/products/pv-series.htm)

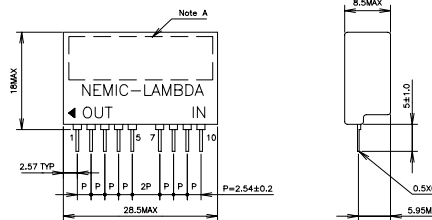
## Outline Drawing



Pin assign  
 1 : +Vout 5 : TRM  
 2,3 : NC 7,8 : -Vin  
 4 : -Vout 9,10 : +Vin

Note A : Indicate of model name, lot No. and country of manufacture.

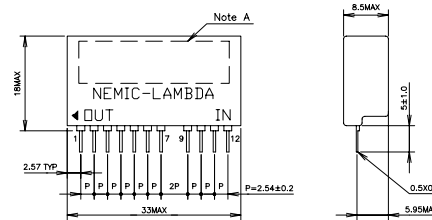
PV1R5



Pin assign  
 1 : +Vout 5 : TRM  
 2,3 : COM 7,8 : -Vin  
 4 : -Vout 9,10 : +Vin

Note A : Indicate of model name, lot No. and country of manufacture.

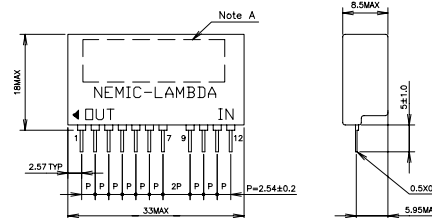
PVD1R5



Pin assign  
 1,2 : +Vout 7 : TRM  
 3,4 : NC 9,10 : -Vin  
 5,6 : -Vout 11,12 : +Vin

Note A : Indicate of model name, lot No. and country of manufacture.

PV3



Pin assign  
 1,2 : +Vout 7 : TRM  
 3,4 : COM 9,10 : -Vin  
 5,6 : -Vout 11,12 : +Vin

Note A : Indicate of model name, lot No. and country of manufacture.

PVD3