



- Compact Footprint/Low Profile
- 5,12,24 & 48V Inputs
- 3.3 to 30V* Single, ± 12 to 15V Dual Outputs
- Output Voltage Adjustment
- -40 to +85C Operating Temperature
- RoHS Compliant Design
- Through Hole and SMT Design

PSS/PSD Series

Ultra Compact, 1.5W to 12W Single and Dual Isolated DC-DC Converters

Key Market Segments & Applications

Telecommunications
 Datacom
 Instrumentation

PSS/PSD Features and Benefits

Features

- Compact
- Input Fuse Protection Built In
- Multiple Input Voltage configurations
- Open Frame (no potting)

Benefits

- Less PCB area used
- Requires no external components
- Easier system configuration
- Lighter in weight

Specifications

Nominal Output Voltage	V	3.3V	5V	12/15V (24/30V)*
DC Input	V	5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-76V		
Efficiency	-	73 to 84% model dependant		
Output Voltage Accuracy	%	±5%		
Output Adjustment	V	2.84V-3.67V	4.3V-6V	12V-15V (24-30V)*
Line Regulation	mV	PSS 20mV, PSD 40mV		
Load Regulation	mV	40		
Temperature Coefficient	%	<0.02%/°C		
Preload		No preload required		
Output Ripple	mV	100	100	120
Overcurrent Protection	-	Output current limiting with automatic recovery.		
Overvoltage protection	-	No		
Remote On/Off (1)	-	Logic low (open to shutdown)		
Cooling	-	Convection/Forced Air Cooled		
Operating Temp. Range	-	-40 to 85°C with 1m/s air (full load)		
Storage Temperature	°C	-40°C to 85°C		
Humidity (Non condensing)	-	5 - 95% RH		
Isolation Voltage	-	500VAC 1 min. Input-Output, Input-Chassis		
Isolation Resistance	-	>100M at 25°C and 70%RH, 500VDC Output-Chassis		
Shock	m/s ²	196.1m/s ²		
Vibration (non operating)	-	10-55-10Hz (sweep for 1 min.) 0.825mm constant (Max 147m/s ²) 1 hour X, Y, Z		
Weight	-	PS1R5: 4g, PS3: 5g, PS6: 8g, PS10:14g		
Size (L"x W"x H")	mm	PSS/PSD1R5: 20x16x8; PSS/PSD3: 28x16x8 PSS/PSD6: 28.5x20.5x8, PSS10: 41x26x8.5		
Warranty		5 years		

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

* For 24/30V output use PSD models - connect across +Vout & -Vout and leave "common" pin not connected

(1) Not available on PS1R5

Model Selector						
Output Voltage (V)	Output Current (A)	Max Output Power (W)	5V Input	12V Input	24V Input	48V Input
Single Outputs						
3.3	0.4	1.32	PSS1R5-5-3R3	PSS1R5-12-3R3	PSS1R5-24-3R3	PSS1R5-48-3R3
3.3	0.6	1.98	PSS3-5-3R3	PSS3-12-3R3	PSS3-24-3R3	PSS3-48-3R3
3.3	1.2	3.96	PSS6-5-3R3			
3.3	1.5	4.95		PSS6-12-3R3	PSS6-24-3R3	PSS6-48-3R3
3.3	2.0	6.6	PSS10-5-3R3	PSS10-12-3R3		
3.3	2.5	8.25			PSS10-24-3R3	PSS10-48-3R3
5.0	0.3	1.5	PSS1R5-5-5	PSS1R5-12-5	PSS1R5-24-5	PSS1R5-48-5
5.0	0.6	3.0	PSS3-5-5	PSS3-12-5	PSS3-24-5	PSS3-48-5
5.0	1.0	5.0	PSS6-5-5	-	-	-
5.0	1.2	6.0	-	PSS6-12-5	PSS6-24-5	PSS6-48-5
5.0	1.6	8.0	PSS10-5-5			
5.0	2.0	10.0	-	PSS10-12-5	PSS10-24-5	PSS10-48-5
12 (15)	0.125 (0.1)	1.5	PSS1R5-5-12	PSS1R5-12-12	PSS1R5-24-12	PSS1R5-48-12
12 (15)	0.25 (0.2)	3.0	PSS3-5-12	PSS3-12-12	PSS3-24-12	PSS3-48-12
12 (15)	0.5 (0.4)	6.0	PSS6-5-12	PSS6-12-12	PSS6-24-12	PSS6-48-12
12 (15)	0.7 (0.56)	8.4	PSS10-5-12			
12 (15)	1.0 (0.8)	12.0		PSS10-12-12	PSS10-24-12	PSS10-48-12
Dual Outputs						
±12(15)*	±0.065 (0.05)	1.56	PSD1R5-5-1212	PSD1R5-12-1212	PSD1R5-24-1212	PSD1R5-48-1212
±12(15)*	±0.13 (0.1)	3.12	PSD3-5-1212	PSD3-12-1212	PSD3-24-1212	PSD3-48-1212
±12(15)*	±0.25 (0.2)	6.0	PSD6-5-1212	PSD6-12-1212	PSD6-24-1212	PSD6-48-1212
±12(15)*	±0.35 (0.28)	8.4	PSD10-5-1212			
±12(15)*	±0.5 (0.4)	12		PSD10-12-1212	PSD10-24-1212	PSD10-48-1212

PSS1R5/S Outline Drawing

TERMINAL ASSIGNMENTS		
PSS	PSD	
1	+Vin	+Vin
2	-Vin	-Vin
3	NC	-Vout
4	-Vout	COM
5	TRM	TRM
6	+Vout	+Vout

PSS3/S Outline Drawing

TERMINAL ASSIGNMENTS		
PSS	PSD	
1	+Vin	+Vin
2	CNT	CNT
3	-Vin	-Vin
4	NC	-Vout
5	-Vout	COM
6	TRM	TRM
7	+Vout	+Vout

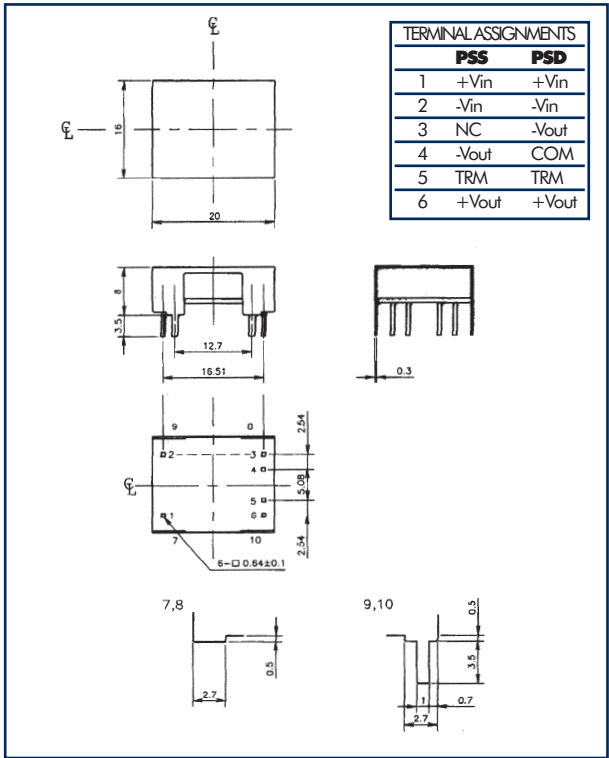
PSS6/S Outline Drawing

TERMINAL ASSIGNMENTS		
PSS	PSD	
1	+Vin	+Vin
2	CNT	CNT
3	-Vin	-Vin
4	NC	-Vout
5	-Vout	COM
6	TRM	TRM
7	+Vout	+Vout

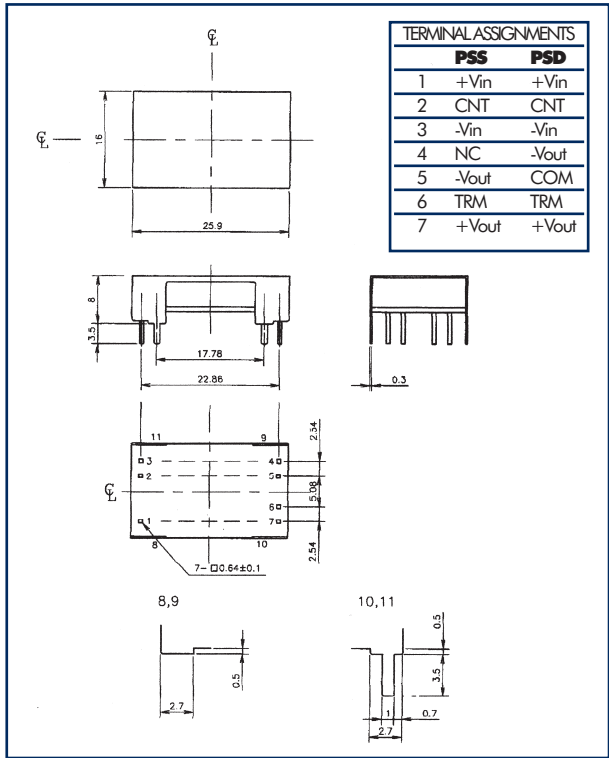
PSS10/S Outline Drawing

TERMINAL ASSIGNMENTS		
PSS	PSD	
1	+Vin	+Vin
2	CNT	CNT
3	-Vin	-Vin
4	NC	-Vout
5	-Vout	COM
6	TRM	TRM
7	+Vout	+Vout

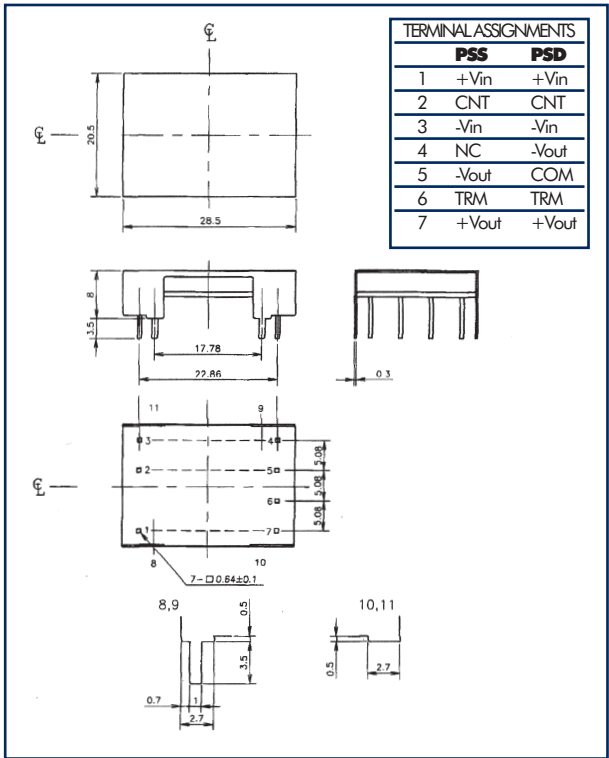
PSS1R5 Outline Drawing



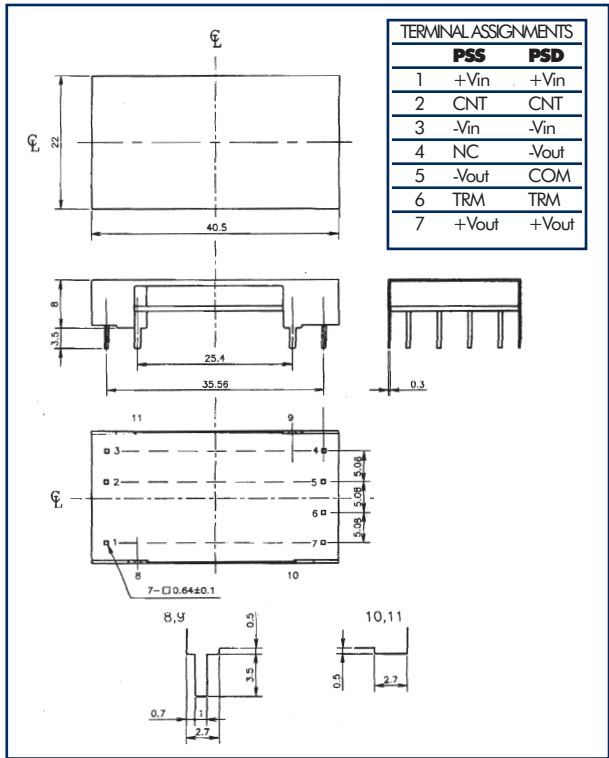
PSS3 Outline Drawing



PSS6 Outline Drawing



PSS10 Outline Drawing



Options	
Suffix	Description
Blank	Through hole mounting
/S	Surface Mount

Full size drawings and more information available at www.lambda-europe.com/ps

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