



PAF700F Series

48V Input Full brick DC-DC Converters



- ◆ 12V output for driving non-isolated converters
- ◆ Safety Approved
- ◆ Full power at 85°C baseplate, operation to 100°C
- ◆ Opto Isolated Remote On / Off
- ◆ Wide Adjustable Output Range

Key Market Segments & Applications

Central Office:	ATM, Sonet, DSL, ISDN, Frame Relay
Broadband:	Switching Equipment, Routers
Wireless/Cellular:	Micro Cells (larger in size/10 sq. mi.) Pico Cells (smaller in size/1 to 2 sq. mi.)
Remote Electronics:	Fixed Local Loop, Fiber Optic Transmission, Microwave Transmission, Wireless Local Loop
Base Station Power Amplifiers	

PAF Features and Benefits

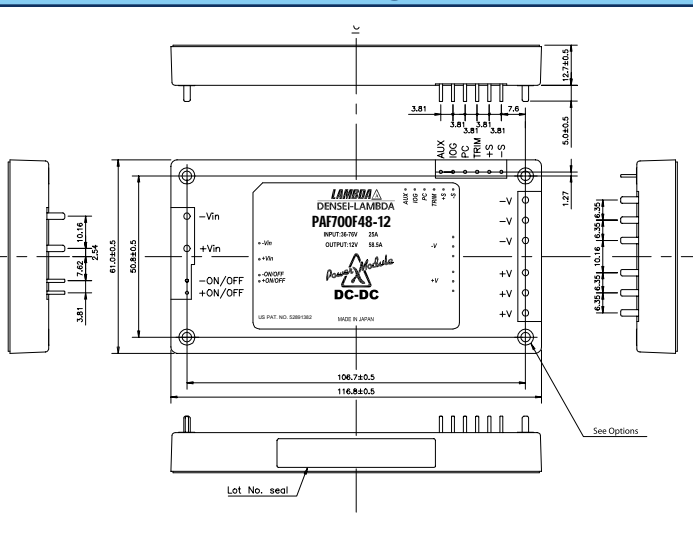
Feature	Benefit
◆ Wide Adjustment Range	◆ Reduces need for custom modules
◆ Parallel Pin	◆ Modules can be connected together for higher current
◆ ASIC Design	◆ Reduced component count, increased MTBF

Specifications

MODEL		PAF700F48-12	PAF700F48-28
ITEMS			
Nominal Output Voltage	VDC	12	28
Output Current (Max)	A	58.5	25
Output Power (Max)	W	702	700
Efficiency (Typ)	%	90 to 91%	
Input Voltage Range	VDC	36-76	
Input Current (Typ)	A	16.5	16.4
Output Voltage Accuracy	%	±1	
Output Voltage Adjustment	VDC	7.2 - 13.8	16.8 - 32.2
Ripple & Noise (Max)	mV	200	280
Line Regulation (Max)	mV	24	56
Load Regulation (Max)	mV	24	56
Temperature Coefficient	-	0.02%/°C	
Overcurrent Protection	%	105 - 140%	
Overvoltage Protection	%	120 - 135%	
Signals & Control	-	Remote sense, remote On/Off, Parallel Pin, DC Good, 7-10V Auxiliary voltage	
Operating Temperature	-	-40°C to +100°C baseplate	
Humidity (operating)	-	20-95% RH Non condensing	
Humidity (storage)	-	10-95% RH Non condensing	
Cooling	-	Conduction (See Installation Manual for heatsink selection)	
Isolation Voltage	VDC	Input - Baseplate 1500V, Input - Output 1500V, Output-Baseplate 500V (for 1 min.)	
Shock	-	196.1m/s ²	
Vibration	-	Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each	
Safety Agency Approvals	-	UL1950, CSA950, EN60950, CE LVD	
Weight (Typ)	g	200	
Size (WxHxD)	in(mm)	2.4 x 0.5 x 4.6 (61 x 12.7 x 116.8) See outline drawing	
Warranty	-	2 years	

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

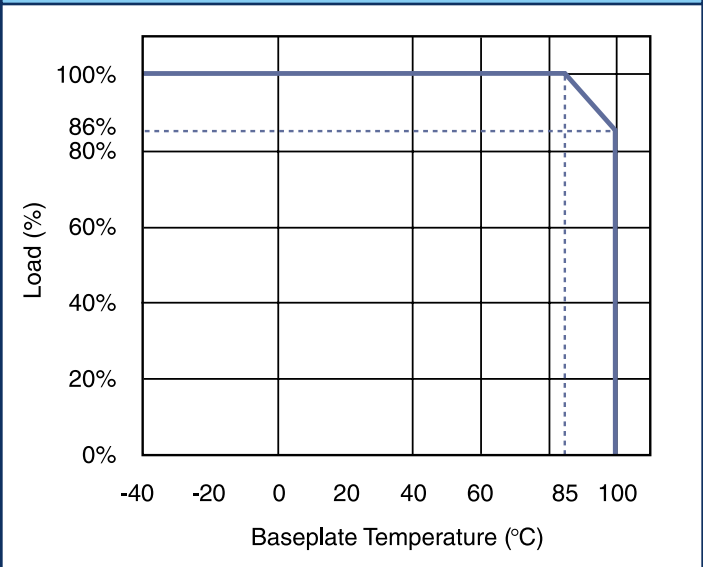
PAF Outline Drawing



Pinout

PIN	Description	Function
-Vin	Negative Input Terminal	Negative Input Terminal
+Vin	Positive Input Terminal	Positive Input Terminal
- ON/OFF	Remote On/Off Negative Terminal	Remote On/Off Negative Terminal
+ ON/OFF	Remote On/Off Positive Terminal	Remote On/Off Positive Terminal
+V	Positive Output Terminal	Positive Output Terminal
-V	Negative Output Terminal	Negative Output Terminal
AUX	7-10V Aux Voltage	7-10V Aux Voltage
IOG	DC Good	DC Good
PC	Parallel Control Connection	Parallel Control Connection
TRIM	Output Adjustment Trim Pin	Output Adjustment Trim Pin
+S	Positive Remote Sense	Positive Remote Sense
-S	Negative Remote Sense	Negative Remote Sense

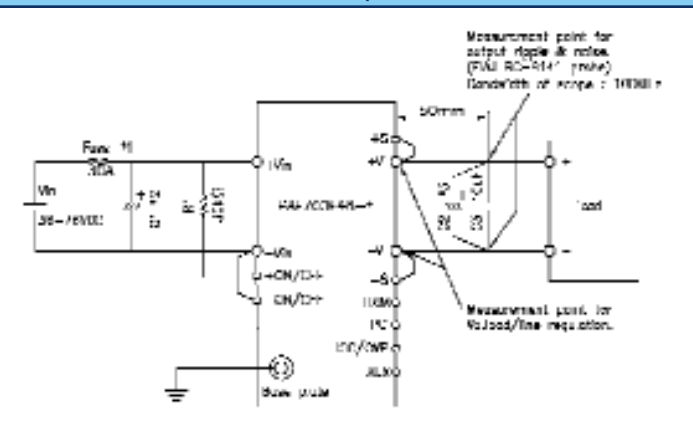
Derating Curve



Other Lambda DC-DC Products

- PAF500F 500W Full Brick (24 & 48 VDC input)
- PAF600F 600W Full Brick (24 & 48 VDC input)
- PAH Half brick DC-DC
- PAQ Quarter brick DC-DC
- PG10A 10W surface mount DC-DC
- SX20 20W surface mount DC-DC
- X 10, 15, & 20W 24V & 48VDC input DC-DC converters

Connection Example



Options

Suffix	Description
Blank	M3 tapped inserts (4)
/T	3.3mm non-threaded inserts (4)

For Additional Information, please visit www.lambdapower.com/products/paf700-series.htm