



## PAF700F Series

700W 48V Input  
Full Brick DC-DC Converters

- 12V output for driving non-isolated converters
- 12V, 28V output for BTS amps
- 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.)<br>Pico Cells (smaller in size/1 to 2 sq. mi.)        |
| Remote Electronics:            | Fixed Local Loop, Fibre Optic<br>Transmission, Microwave Transmission,<br>Wireless Local Loop |
| Base Station Power Amplifiers  |   |
| Intermediate Bus Architectures |   |

### PAF700F Features and Benefits

#### Features

- Wide adjustment range
- Parallel Pin
- ASIC Design

#### Benefits

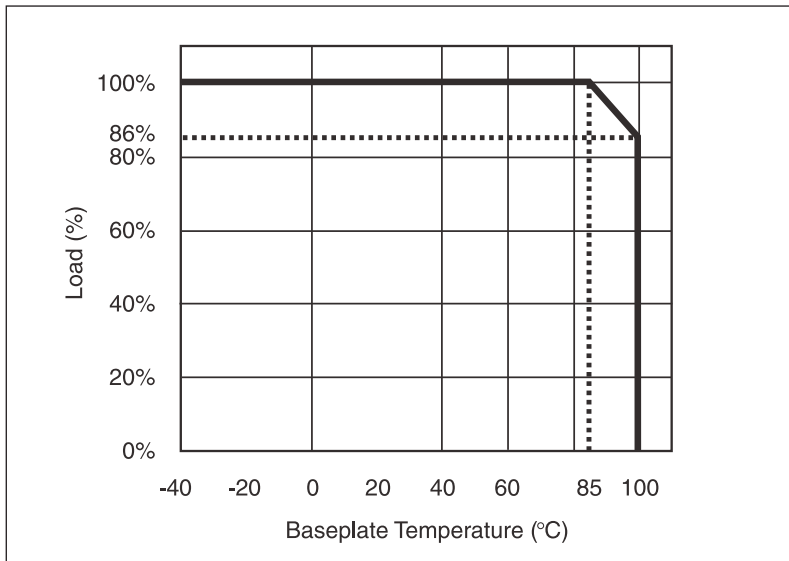
- Reduces need for custom modules
- Modules can be connected together for higher current
- Reduced component count, increased MTBF

### 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%	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%	
Parallel Operation		Yes	
Series Operation		Yes	
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 <sup>2</sup>	
Vibration	-	Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s <sup>2</sup> ) X,Y,Z 1 hour each	
Safety Agency Approvals	-	UL60950-1, CSAC22.2 No. 60950-1, EN60950, CE LVD	
Weight (Typ)	g	200	
Size (WxHxD)	mm (in)	61 x 12.7 x 116.8 (2.4 x 0.5 x 4.6) See outline drawing	
Warranty	yrs	2	

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

**Derating Curve**



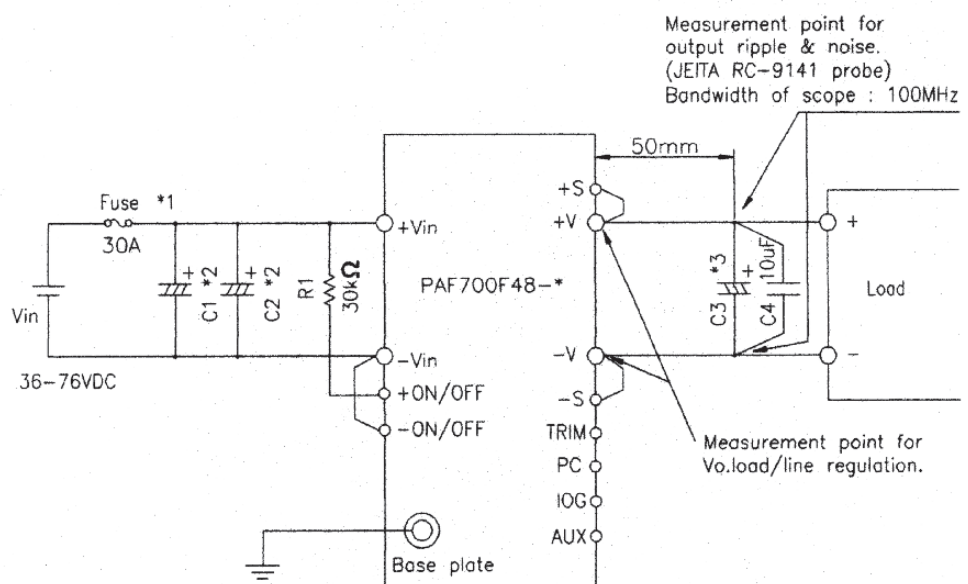
**Part Number Scheme**

Full Brick	Max Power Watts	Full Function	Nominal Input Voltage	Output Voltage	Option Suffix
PAF	700	F	48	12 or 28	Blank = M3 Tapped inserts T = 3.3mm Non-threaded through hole

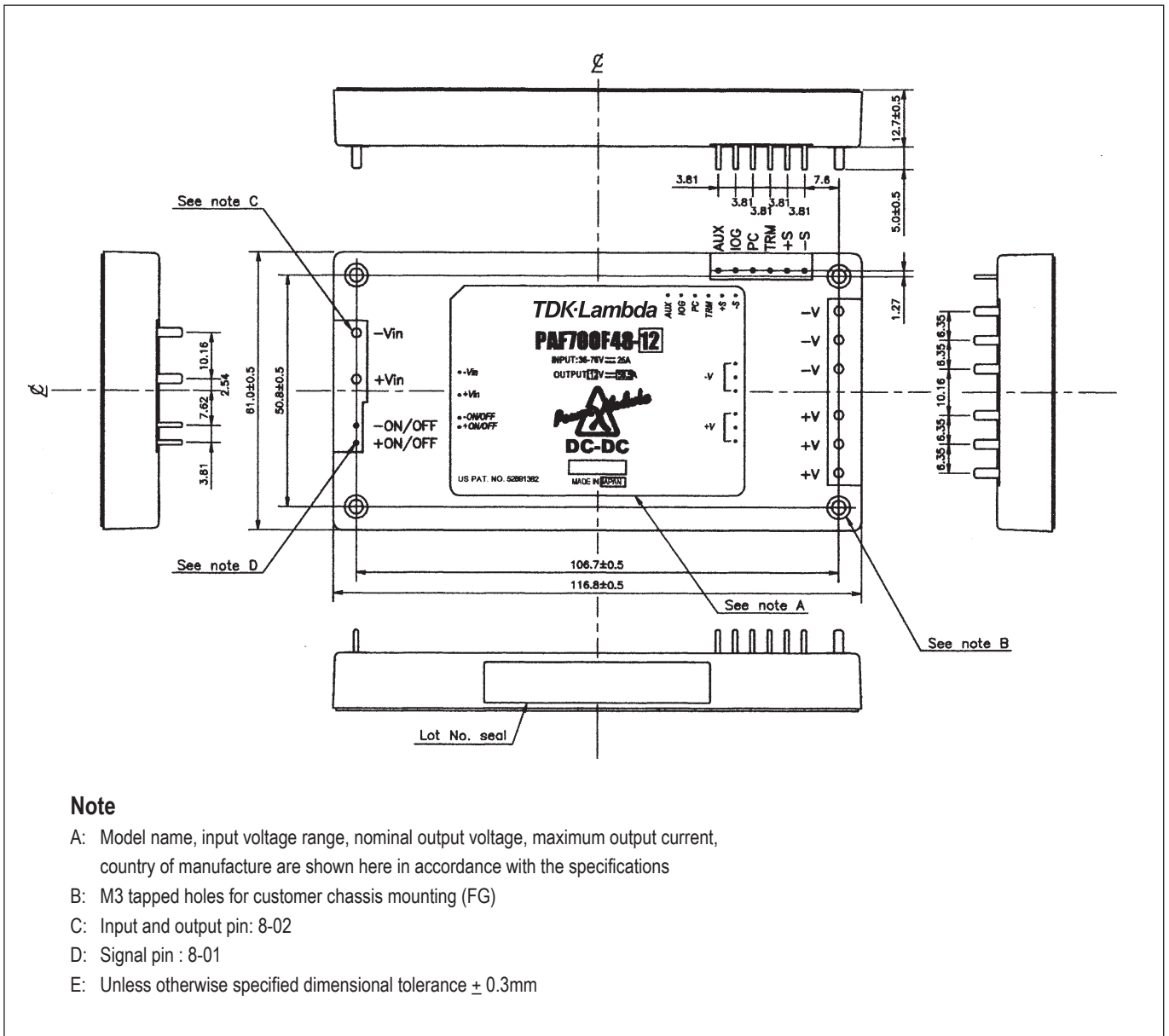
**Connection Example**

**Note**

- 1 Use external fuse of fast blow type, for each unit
- 2 Put input capacitor, C1 and C2, greater than 220uF for each. If the impedance of input line is high, C1 and C2 capacitance must be greater than above.
- 3 Put output capacitor, C3 (12v: more than 470uF, 28V: greater than 220uF). If the ambient temperature is less than -20C, use 4 pieces of the recommended capacitor above.
- 4 Refer to instruction manual for further details.



## Outline Drawing PAF700F



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

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