



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.) Pico Cells (smaller in size/1 to 2 sq. mi.) |
| Remote Electronics: | Fixed Local Loop, Fibre Optic Transmission, Microwave Transmission, Wireless Local Loop |
| Base Station Power Amplifiers | |
| Intermediate Bus Architectures | |

PAF700F Features and Benefits

Features

- Wide adjustment range
- Parallel Pin
- ASIC Design

Benefits

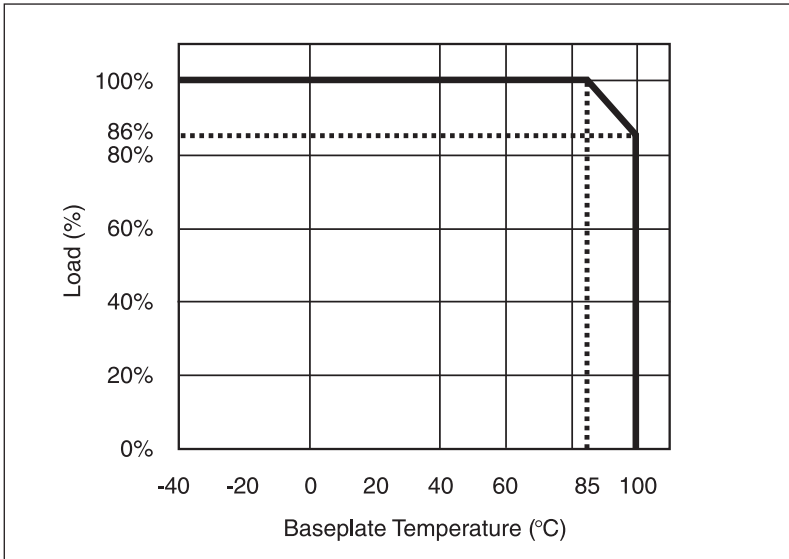
- Reduces need for custom modules
- Modules can be connected together for higher current
- Reduced component count, increased MTBF

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 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 | - | IEC/UL/CSA/EN62368-1, 60950-1, CE Mark | |
| 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



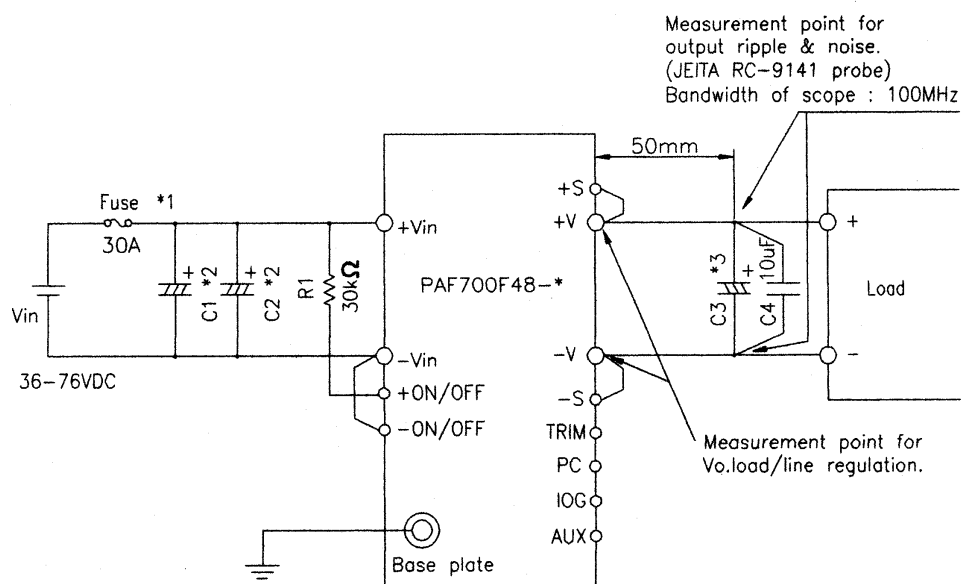
Part Number Scheme

| 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 |

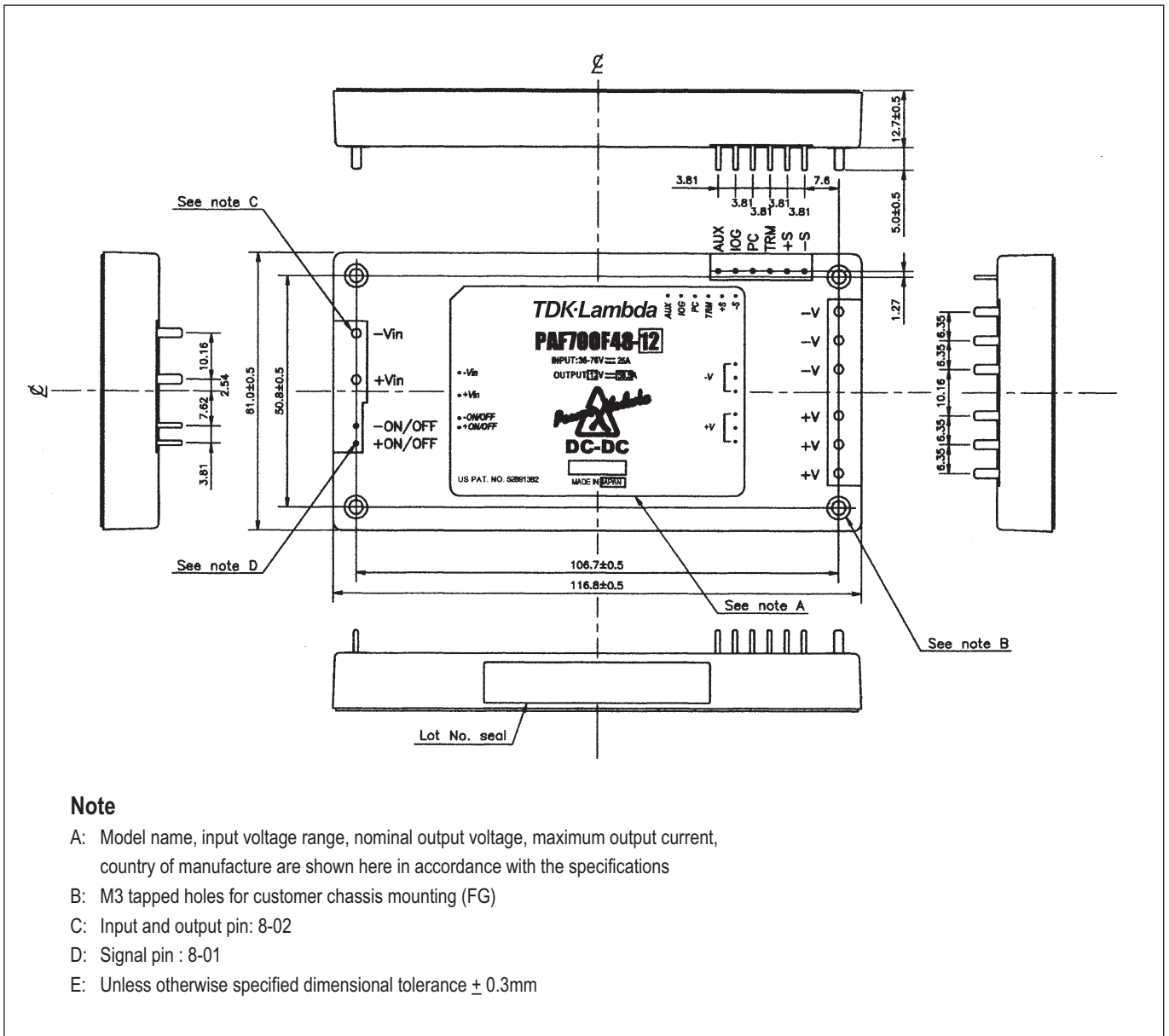
Connection Example

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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