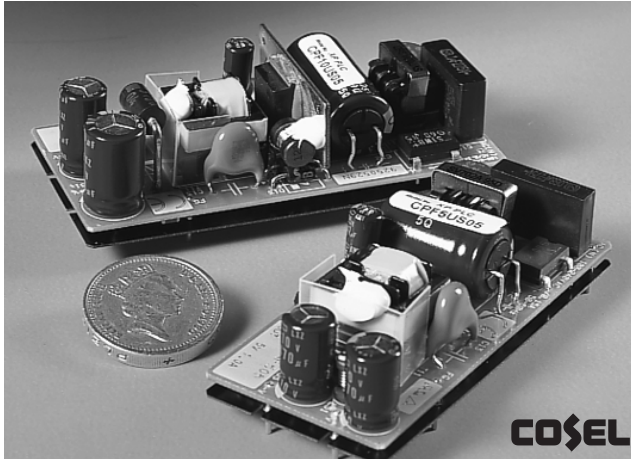


# AC-DC PCB Mount

## 5-10 Watts CPF Series



## THE XPERTS IN POWER

- PCB Mounting
- 
- Low Cost
- 
- Universal Input
- 
- Small Footprint
- 
- Rugged Design
- 
- Surface Mount Technology
- 
- Accessory Mounting Boards

### Specification

#### Input

- Input Voltage* • 85-264 VAC (110-370 VDC)
- Input Frequency* • 47-440 Hz
- Input Current* • 0.3 A max (110 VAC  $I_O = 100\%$ )
- Inrush Current* • 15 A typical (110 VAC  $I_O = 100\%$ ),  
30 A typical (230 VAC =  $I_O 100\%$ )  
at cold start
- Earth Leakage Current* • 0.5 mA max at 230 VAC 60 Hz

#### Output

- Output Voltage* • See Table
- Minimum Load* • No minimum load required
- Start-Up Delay* • 700 ms max at rated input & load
- Hold-Up Time* • 10 ms min
- Initial Set Accuracy* • -3%, +6% max
- Drift* • 0.6% max
- Line Regulation* • See Table
- Load Regulation* • See Table
- Ripple & Noise* • 260 mV pk-pk max, 20 MHz bandwidth
- Overvoltage Protection* • Operates >115%  $V_{nom}$ , clamps by zener diode
- Overcurrent Protection* • Operates >125% of rating, auto recovery
- Temperature Coefficient* • 0.04%/°C

#### General

- Efficiency* • See Table
- Isolation* • 3000 VAC Input to Output  
2000 VAC Input to Ground  
500 VAC Output to Ground
- Switching Frequency* • 100 kHz typical

#### Environmental

- Operating Temperature* • -10 °C to +55 °C (derate linearly above +55 °C to 25% at +70 °C)
- Storage Temperature* • -20 °C to +75 °C
- Humidity* • 20-95% RH non-condensing
- Shock* • 20 G 11 ms once each X, Y & Z axis
- Vibration* • 2 G 10-55 Hz 3 min period for 60 mins along X, Y & Z axis

#### EMC & Safety

- Emissions* • EN55022 Level B conducted  
EN55022 Level B radiated
- ESD Susceptibility* • EN61000-4-2 Level 3 Air,  
Level 2 Contact
- Radiated Susceptibility* • EN61000-4-3 Level 3
- EFT/Burst* • EN61000-4-4 Level 3
- Surge* • EN61000-4-5 Level 3 line to line,  
Level 4 line to ground
- Safety Approvals* • UL1950, C-UL, EN60950, VDE 0160

## OUTPUT VOLTAGE & CURRENT RATINGS

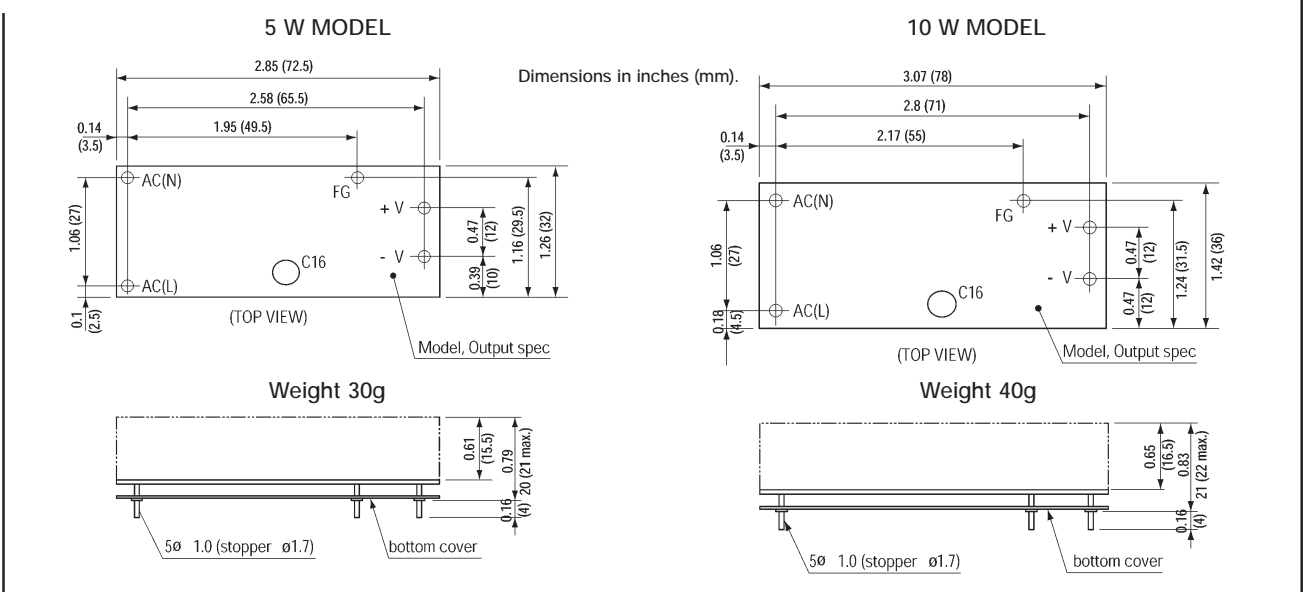
**CPF**

Output Voltage	Output Current	Peak Current <sup>(1)</sup>	Efficiency Typical	Line Regulation <sup>(2)</sup>	Load Regulation <sup>(3)</sup>	Model Number
3.3 V	1.00 A	1.20 A	68%	20 mV	40 mV	CPF5US03
5.0 V	1.00 A	1.20 A	77%	20 mV	40 mV	CPF5US05
12.0 V	0.45 A	0.54 A	78%	48 mV	100 mV	CPF5US12
15.0 V	0.35 A	0.42 A	77%	60 mV	120 mV	CPF5US15
24.0 V	0.22 A	0.27 A	81%	96 mV	150 mV	CPF5US24
3.3 V	2.00 A	2.40 A	65%	20 mV	40 mV	CPF10US03
5.0 V	2.00 A	2.04 A	74%	20 mV	40 mV	CPF10US05
12.0 V	0.90 A	1.08 A	78%	48 mV	100 mV	CPF10US12
15.0 V	0.70 A	0.84 A	81%	60 mV	120 mV	CPF10US15
24.0 V	0.45 A	0.54 A	81%	96 mV	150 mV	CPF10US24

**Notes**

1. Peak rating duration ≤10 seconds with a max duty cycle of 35%.
2. Measured low line to high line.
3. Measured no load to full load.

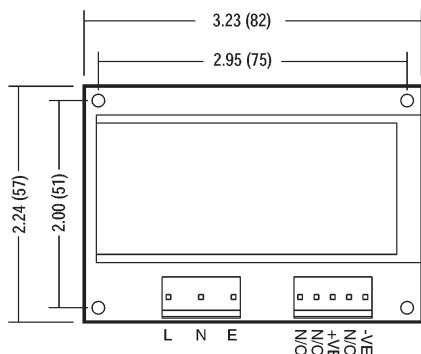
### Mechanical Details



### CPF Board

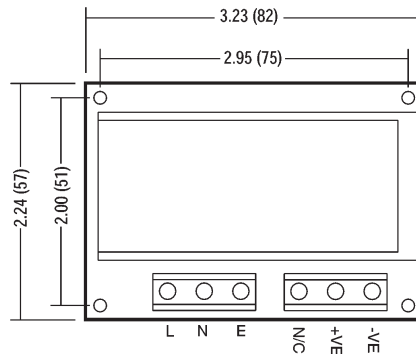
The CPF board is designed to accept any of the CPF Series models.  
Order **CPFBOARD-M** for molex connectors or **CPFBOARD-T** for screw terminals.

**CPFBOARD-M**



Mounting hole M3 clearance.  
Mating Housing Molex 09-91-0500  
Crimp Pins Molex 15-04-0219

**CPFBOARD-T**



Mounting hole M3 clearance.  
All connections screw terminals 10 mm pitch

Max height  
17.5 mm