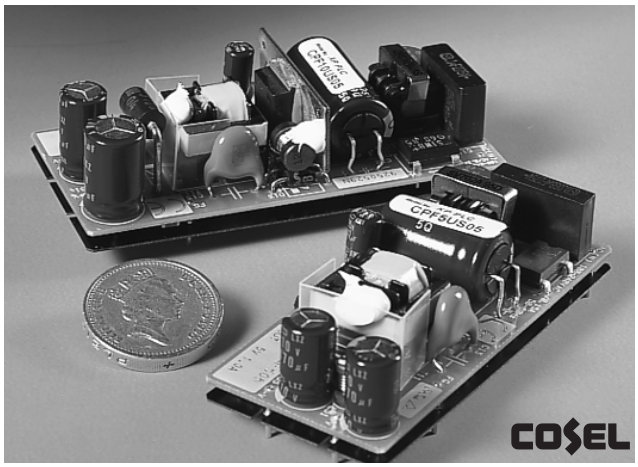
# AC-DC PCB Mount

## 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% Vnom, 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<br>2000 VAC Input to Ground<br>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<br>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

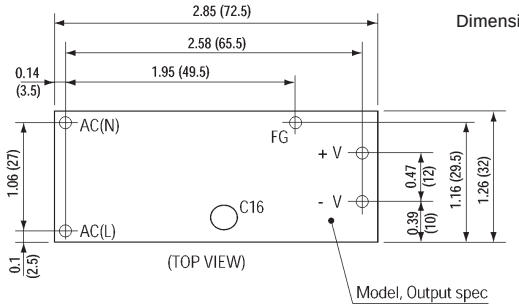
| Output Voltage | Output Current | Peak Current[1] | Efficiency Typical | Line Regulation[2] | Load Regulation[3] | Model Number |
|---|---|---|---|---|---|---|
| 3.3 V | 1.00 A | 1.20 A | 68% | 20 mV | 40 mV | CPF5US03 |
| 5.0 V | 1.00 A | 1.20 A | 77% | 20 mV | 40 mV | CPF5US05 |
| 12.0 V | 0.45 A | 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.*

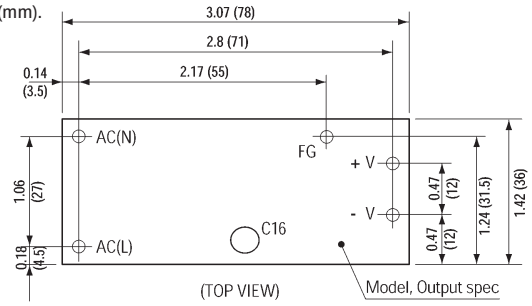
## Mechanical Details

5 W MODEL

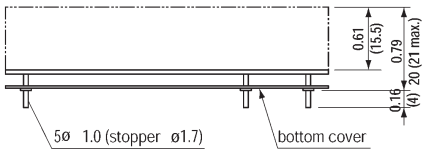



Dimensions in inches (mm).

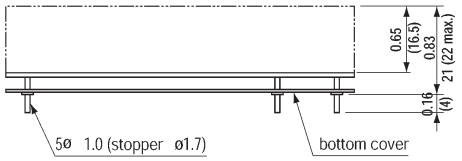
10 W MODEL




Weight 30g



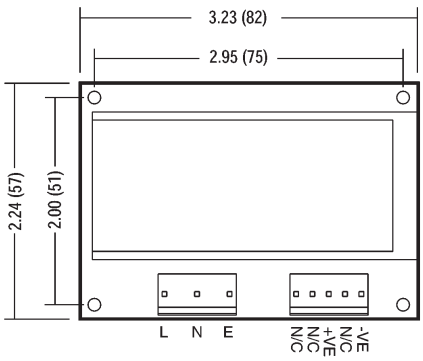

Weight 40g




## 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.

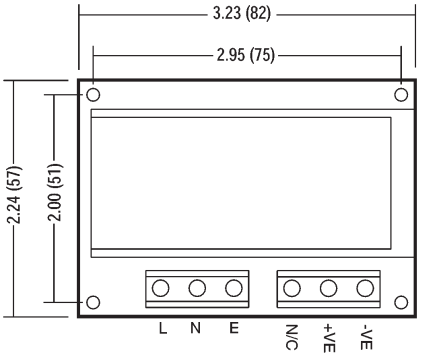
CPFBOARD-M




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

Max height
17.5 mm

CPFBOARD-T




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