



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## FWC50 Series

50W ITE Desktop Power Supply

**FWC50 Is Not Recommended For New Designs. Not Level VI Compliant. Not for Consumer / Household use for units built after February, 2016. Please Use FWE050 Class II or FWE050 Class I As A Replacement**

- High Efficiency
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time >14ms at full load
- Safety Approval - EN60950-1 Class I
- CEC Compliant

| Elpac Part Number | Output Voltage | Output Current | Peak Current <sup>1</sup> | Total Regulation <sup>2</sup> | Typical Efficiency <sup>3</sup> |
|-------------------|----------------|----------------|---------------------------|-------------------------------|---------------------------------|
| FWC5012-760F      | 12.0V          | 4.2A           | 5.0A                      | ±5%                           | 83%                             |
| FWC5018-760F      | 18.0V          | 2.8A           | 3.3A                      | ±5%                           | 86%                             |
| FWC5024-760F      | 24.0V          | 2.1A           | 2.5A                      | ±5%                           | 87%                             |

**Notes**

1 Maximum peak load (60W) lasting 500ms with a maximum 10% duty cycle.

2 Includes initial setting, line regulation, load regulation, and thermal drift.

3 Typical at 115VAC (including output cable).

## Input

|                             |  |
|-----------------------------|--|
| Input Voltage               | 85 - 264VAC 100 - 240VAC Nominal                             |
| Input Frequency             | 47 - 63Hz  |
| Input Current               | <1.0A rms  |
| Inrush Current              | <37A at 230VAC cold start                                    |
| Zero Load Power Consumption | <0.3W  |
| Touch Leakage Current       | <200 $\mu$ A @ 132VAC @ 60Hz<br><300 $\mu$ A @ 264VAC @ 60Hz |

## Output

|                             |  |
|-----------------------------|--|
| Output Voltage              | See Table  |
| Total Regulation            | +/-5%  |
| Minimum Load                | No minimum load required                             |
| Start-Up Delay              | <250ms   |
| Hold-Up Time                | >14ms at any input voltage                           |
| Ripple & Noise              | <1% pk-pk ** *                                       |
| Over Voltage Protection     | 110-135%   |
| Over Temperature Protection | Active - Recoverable; plus Passive - Non Recoverable |
| Over Current Protection     | 120 - 180%   |
| Short Circuit Protection    | shutdown, auto-restart (hiccup mode)                 |

### Notes

\* Ripple and noise measured with 20MHz bandwidth; 10 $\mu$ F tantalum capacitor in parallel with a 0.1 $\mu$ F ceramic capacitor.


## General

|            |  |
|------------|--|
| Efficiency | Avg Efficiency 86.7% @ 115VAC; 86.9% @ 230VAC      |
| MTBF       | min. 100,000 hours demonstrated                    |
| Size       | 05.00" (127.0mm) x 3.00" (76.2mm) x 1.30" (33.0mm) |
| Weight     | 0.75 lbs (0.34 kg)                                 |

## Environmental

|                       |   |
|-----------------------|---|
| Operating Temperature | 0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C) |
| Storage Temperature   | -40°C to +85°C  |
| Relative Humidity     | 5-95%, non-condensing   |
| Cooling               | Natural Convection  |
| Vibration             | All units production tested to 19.6m/s <sup>2</sup>               |

## EMC & Safety

|   |  |
|---|--|
| Emissions   | FCC class B, CISPR22 class B EN61000-3-2, -3 |
| Immunity  | EN61000-4-2, -3, -4, -5, -6, -8, -11         |
| Certified by TUV to the following:  | cTUVus                                       |
|  | UL 60950-1                                   |
|   | CAN/CSA-22.2 No.60950-1                      |
|   | CB per IEC60950-1                            |
|   | CE marked to LVD & EMC Directive             |

## Input Configuration

|                                 |   |
|---------------------------------|---|
| Standard Input Cable            | 6 ft cable with US standard (Nema 5-15) 3 prong connector |
| Connection on Power Supply Body | IEC 320 C14 Receptacle                                    |

## Output Configuration

|                       |                                |
|-----------------------|--------------------------------|
| Standard Output Cable | 6 ft.                          |
| Cord Size             | 2x16awg zip                    |
| Connector (PSU side)  | Switchcraft 760 or equivalent  |
| Mating Connector      | Switchcraft 712A or equivalent |

## Output Pin Assignments



Center

+v1

Outside

Return

