

## ZPSA40 & 60 Series

2" x 4" 40W to 60W

AC-DC Power Supplies

- Single and Multiple Outputs
- Wide Range AC Input
- Low Profile, Industry Standard Footprint
- Global Safety Agency Compliance
- RoHS Compliant

### Key Market Segments & Applications

Video/Audio Routers  
 Datacom  
 Point of Sale  
 Test and Measurement  
 LED Signs

### ZPSA40 & 60 Features and Benefits

#### Features

- Industry Standard Footprint
- Up to 88% efficiency
- Broad Product Range
- Meets EN61000-4 Immunity

#### Benefits

- Available to Second Source
- Less System Heating
- Optimization of Power Supply to System
- Greater Reliability

### Specifications

| MODEL                       |     | ZPSA40                                                                             | ZPSA60 |
|-----------------------------|-----|------------------------------------------------------------------------------------|--------|
| ITEMS                       |     |                                                                                    |        |
| Input Voltage range         | -   | 90 - 264VAC (47 - 440Hz) or 120 - 370VDC                                           |        |
| Inrush Current (132/265VAC) | A   | 25 / 50                                                                            |        |
| Input Current (115/230VAC)  | A   | < 1.2A                                                                             | < 1.4A |
| Leakage Current             | mA  | 0.8mA max (264VAC, 60Hz)                                                           |        |
| Temperature Coefficient     | -   | ±0.05%/°C                                                                          |        |
| Voltage Accuracy            | -   | ±1%                                                                                |        |
| Minimum Load                | A   | None                                                                               |        |
| Load Regulation             | -   | ±1%                                                                                |        |
| Line Regulation             | -   | ±0.5%                                                                              |        |
| Ripple & Noise (1)          | mV  | 1% or 50mV whichever is greater                                                    |        |
| Short Circuit Protection    | -   | Continuous - hiccup mode                                                           |        |
| Overvoltage Protection      | V   | Typically 110-130% of nominal                                                      |        |
| Hold Up Time (Typ)          | ms  | 8ms at 115VAC input                                                                |        |
| LED Indicator               | -   | Green LED = OK                                                                     |        |
| Operating Temperature       | -   | 0 to +70°C with derating                                                           |        |
| Storage Temperature         | -   | -20 to +85°C                                                                       |        |
| Humidity (non condensing)   | -   | 10 - 95% RH                                                                        |        |
| Cooling                     | -   | Convection                                                                         |        |
| Withstand Voltage           |     | Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min. |        |
| Isolation Resistance        |     | >100MΩ at 25C & 70%RH, Output to Ground 500VDC                                     |        |
| Vibration (non operating)   |     | 23.52m/s <sup>2</sup> (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)         |        |
| Shock                       | -   | < 196.1 m/s <sup>2</sup> (20G)                                                     |        |
| Safety Agency Approvals     | -   | UL60950-1, CSA60950-1, EN60950-1 Class I, CE Mark (LVD)                            |        |
| Conducted & Radiated EMI    | -   | EN55022-B, FCC Class B                                                             |        |
| Immunity                    | -   | EN61000-4-2,-3,-4,-5,-6,-8                                                         |        |
| Weight (Typ)                | g   | 130g                                                                               |        |
| Size (WxLxH)                | mm  | 101.6 X 50.8 X 27.1 (including underside components )                              |        |
| Warranty                    | yrs | 2                                                                                  |        |

**Notes:** (1) Measured with 0.1μF ceramic & 10μF electrolytic at 20MHz BW

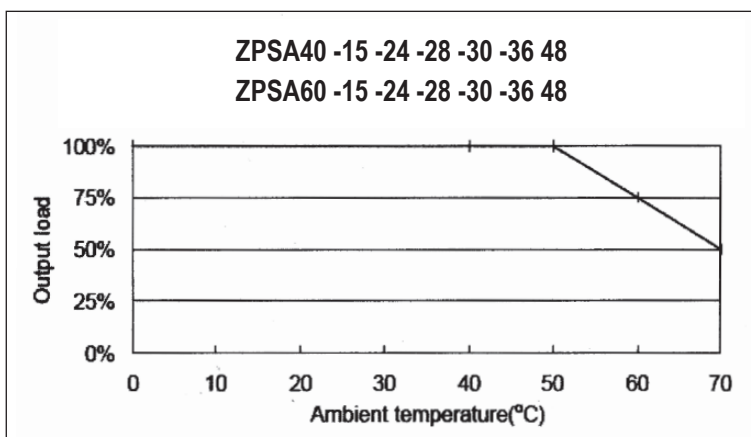
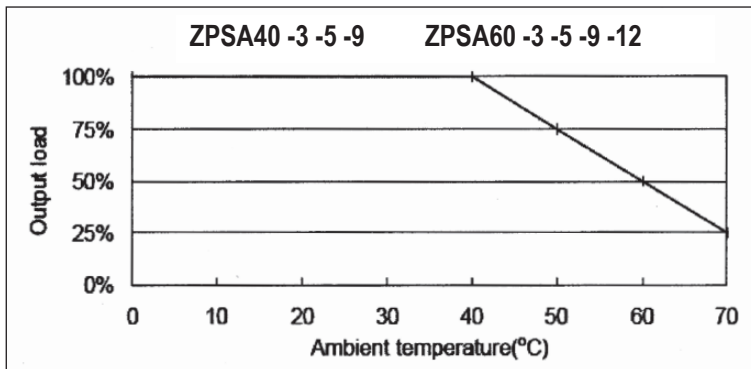
## Model Selector

| Model      |    | Output Voltage (V) | Maximum Output (A) | Peak Load (A) (2) | Output Power (W) | Efficiency (typ)% |
|------------|----|--------------------|--------------------|-------------------|------------------|-------------------|
| ZPSA40-3R3 | V1 | 3.3                | 6.0                | 7.2               | 20.0             | 74                |
| ZPSA60-3R3 | V1 | 3.3                | 8.0                | 8.5               | 26.0             | 74                |
| ZPSA40-5   | V1 | 5.0                | 6.0                | 7.2               | 30.0             | 79                |
| ZPSA60-5   | V1 | 5.0                | 8.0                | 9.0               | 40.0             | 79                |
| ZPSA40-9   | V1 | 9.0                | 4.45               | 5.34              | 40.0             | 83                |
| ZPSA60-9   | V1 | 9.0                | 6.67               | 8.0               | 60.0             | 83                |
| ZPSA40-12  | V1 | 12.0               | 3.34               | 4.0               | 40.0             | 85                |
| ZPSA60-12  | V1 | 12.0               | 5.0                | 6.0               | 60.0             | 85                |
| ZPSA40-15  | V1 | 15.0               | 2.67               | 3.2               | 40.0             | 85                |
| ZPSA60-15  | V1 | 15.0               | 4.0                | 4.8               | 60.0             | 85                |
| ZPSA40-24  | V1 | 24.0               | 1.67               | 2.0               | 40.0             | 86                |
| ZPSA60-24  | V1 | 24.0               | 2.5                | 3.0               | 60.0             | 86                |
| ZPSA40-28  | V1 | 28.0               | 1.43               | 1.71              | 40.0             | 86                |
| ZPSA60-28  | V1 | 28.0               | 2.14               | 2.57              | 60.0             | 86                |
| ZPSA40-30  | V1 | 30.0               | 1.33               | 1.6               | 40.0             | 87                |
| ZPSA60-30  | V1 | 30.0               | 2.0                | 2.4               | 60.0             | 87                |
| ZPSA40-36  | V1 | 36.0               | 1.11               | 1.33              | 40.0             | 87                |
| ZPSA60-36  | V1 | 36.0               | 1.67               | 2.0               | 60.0             | 87                |
| ZPSA40-48  | V1 | 48.0               | 0.834              | 1.0               | 40.0             | 88                |
| ZPSA60-48  | V1 | 48.0               | 1.25               | 1.5               | 60.0             | 88                |

Notes: (2) Average not to exceed max power, <30s, 10% duty cycle

## Derating Curve ZPSA40 & 60 Series

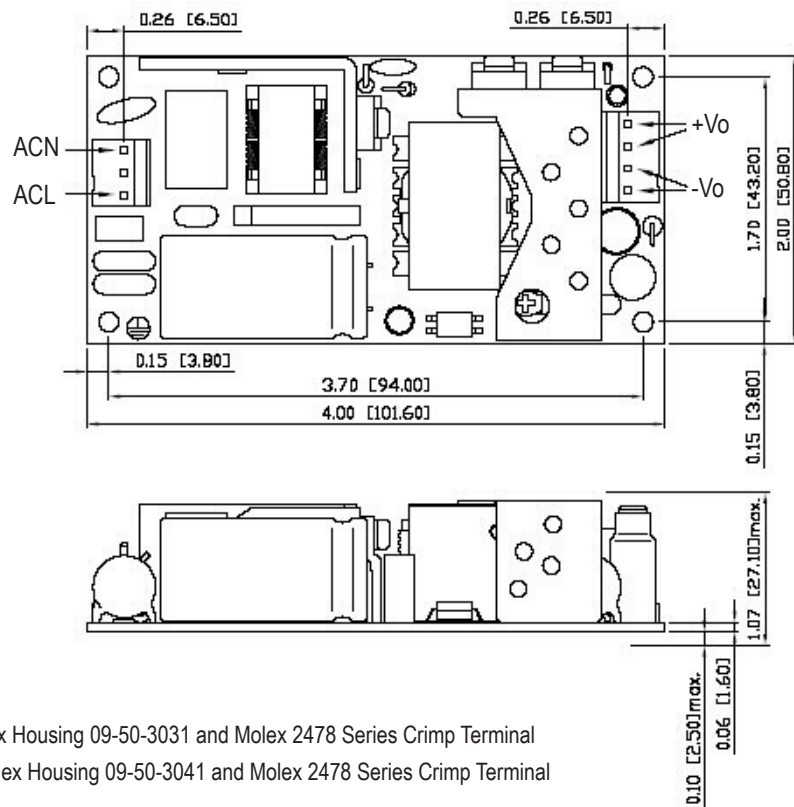
**INTERMEDIATE VOLTAGES AVAILABLE  
PLEASE CONSULT SALES**



## Outline Drawing ZPSA40 & 60 Series

**Note:** All Dimensions are in inches (mm)

Tolerances:  $XX \pm 0.2$  ( $.XX \pm .5$ ) unless otherwise noted



Input Connector Mates with Molex Housing 09-50-3031 and Molex 2478 Series Crimp Terminal  
Output Connector Mates with Molex Housing 09-50-3041 and Molex 2478 Series Crimp Terminal

### Options

| Suffix | Description      |
|--------|------------------|
| Blank  | Molex connectors |
| /P     | PCB mount pins   |

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