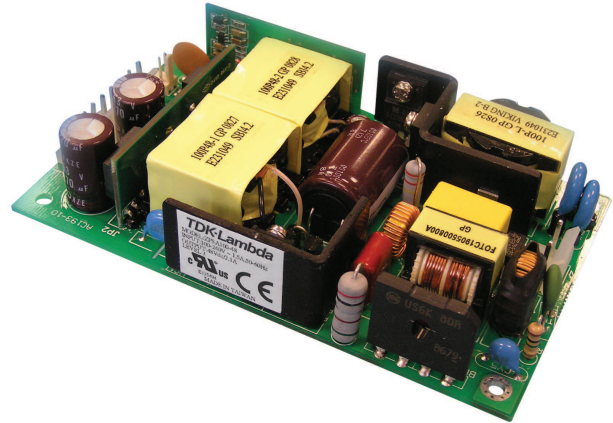


3" x 5" 100W AC-DC Power Supplies

Features

- ◆ PFC
- ◆ Wide Range AC Input
- ◆ Low Profile, Industry Standard Footprint
- ◆ Global Safety Agency Compliance
- ◆ RoHS Compliant
- ◆ Up to 84% efficiency
- ◆ Meets EN61000-4 Immunity



Key Market Segments & Applications



Specifications

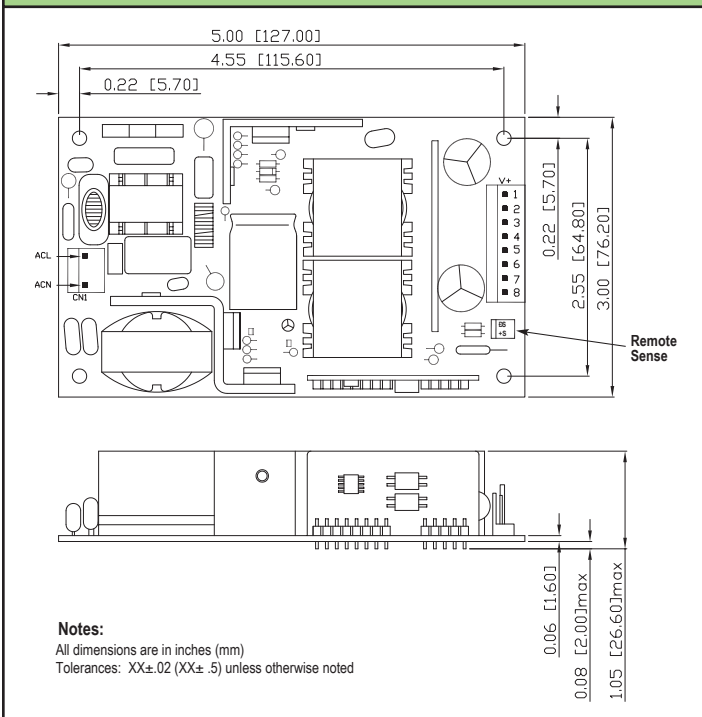
| Model | | ZPSA100 |
|------------------------------|--------|--|
| Input Voltage range | - | 90 - 264VAC (47 - 440Hz) or 120 - 370VDC |
| Inrush Current | A | 25 / 50 (cold start) |
| Input Current (115/230VAC) | A | 1.1 / 0.6 |
| Temperature Coefficient | - | ±0.05%/°C |
| Voltage Accuracy | - | ±1% |
| Minimum Load | A | None |
| Load Regulation | - | ±1% |
| Line Regulation | - | ±0.5% |
| Ripple & Noise (1) | mV | 5V: 2%, others 1% |
| Short Circuit Protection | - | Foldback |
| Overvoltage Protection | V | Typically 110-130% of nominal, auto recovery |
| Hold Up Time (Typ) | ms | 16ms at 115VAC input |
| LED Indicator | - | Green LED = OK |
| Operating Temperature | °C | 0 to +70°C with derating/air flow |
| Storage Temperature | °C | -20 to +85 |
| Humidity (non condensing) | - | 10 - 95% RH |
| Cooling | - | Convection/air flow |
| Withstand Voltage | - | Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min. |
| Isolation Resistance | - | >100M at 25°C & 70%RH, Output to Ground 500VDC |
| Vibration (non operating) | - | 23.52m/s ² (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour) |
| Shock | - | < 196.1 m/s ² (20G) |
| Safety Agency Certifications | - | UL/CSA/EN60950-1 (2nd Ed) Class I , CE Mark (LVD) |
| Conducted & Radiated EMI | - | EN55022-B, FCC Class B |
| Immunity | - | EN61000-4-2,-3,-4,-6,-8 |
| Weight (Typ) | g | 385 |
| Size (WxLxH) | in(mm) | 3 x 5 x 1.05 in. (76.2 x 127 x 26.6 mm) including underside components |
| Warranty | yrs | 2 Years |

- (1) 5V measured with 0.1uF ceramic & 220uF electrolytic at 20MHz BW, all other models measured with 0.1uF & 10uF ceramic electrolytic at 20MHz BW

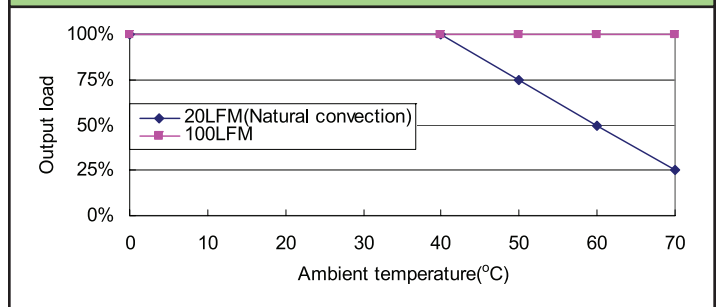
Model Selector

| Model | Output Voltage (V) | Maximum Load (A) | Efficiency (%) | Ripple and Noise | Voltage Accuracy | Line Regulation | Load Regulation |
|------------|--------------------|------------------|----------------|------------------|------------------|-----------------|-----------------|
| ZPSA100-5 | 5V | 20A | 83% | 2% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-9 | 9V | 11.2A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-12 | 12V | 8.4A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-15 | 15V | 6.7A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-18 | 18V | 5.6A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-24 | 24V | 4.2A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |
| ZPSA100-48 | 48V | 2.1A | 84% | 1% | ± 1% | ± 0.5% | ± 1% |

Outline Drawing



Derating Curve



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

Output Connector Mates with Molex Housing 09-50-1081 and Molex 5194 Series Crimp Terminal

Sense Connector Mates with Molex Housing 22-01-1022 and Molex 2759 or 5159 Crimp Terminal

Pin Assignments

| PIN | Function |
|-----|----------|
| 1 | Vout (+) |
| 2 | Vout (+) |
| 3 | Vout (+) |
| 4 | Vout (+) |
| 5 | Vout (-) |
| 6 | Vout (-) |
| 7 | Vout (-) |
| 8 | Vout (-) |

Other Industrial Products

| | |
|--------------|--|
| KPSA | 5 - 15W pcb mount |
| KM | 15 - 40W pcb mount medical |
| ZPSA/ZPD/ZPT | 40 - 60W, single, dual and triple output |
| ZWS | 5 - 240W single output |

For Additional Information, please visit us.tdk-lambda.com/lp/products/zpsa-series.htm

