

## ZPSA20 Series

2" x 3.5" 20W AC-DC  
Power Supplies

- 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 and Lighting

### ZPSA20 Features and Benefits

#### Features

- Industry Standard Footprint
- Up to 82% 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

| ITEMS                      |     | MODEL | ZPSA20   |
|----------------------------|-----|-------|--|
| Input Voltage range        | (1) | -     | 85 - 264VAC (47 - 440Hz) or 120 - 370VDC   |
| Inrush Current             |     | A     | 40A max at 240VAC input, 25°C ambient cold start,                                  |
| Input Current (115/230VAC) |     | A     | 0.4 / 0.25   |
| Leakage Current            |     | mA    | 0.6mA maximum (264VAC, 60Hz)   |
| Temperature Coefficient    |     | -     | ±0.05%/°C  |
| Voltage Accuracy           |     | -     | ±1%  |
| Minimum Load               |     | A     | None   |
| Load Regulation            |     | -     | ±1%  |
| Line Regulation            |     | -     | ±0.5%  |
| Ripple & Noise             | (2) | 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    | 12ms at 115VAC input   |
| 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       |     |       | >100ΩM at 25°C & 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    |     | -     | IEC/UL/CSA/EN62368-1, 60950-1, CE Mark   |
| Conducted & Radiated EMI   |     | -     | EN55022-B, FCC Class B   |
| Immunity                   |     | -     | EN61000-4-2,-3,-4,-6,-8  |
| Weight (Typ)               |     | g     | 100g   |
| Size (WxLxH)               |     | mm    | 88.9 X 50.8 X 20.32 (including underside components )                              |
| Warranty                   |     | yrs   | 2  |

#### Notes:

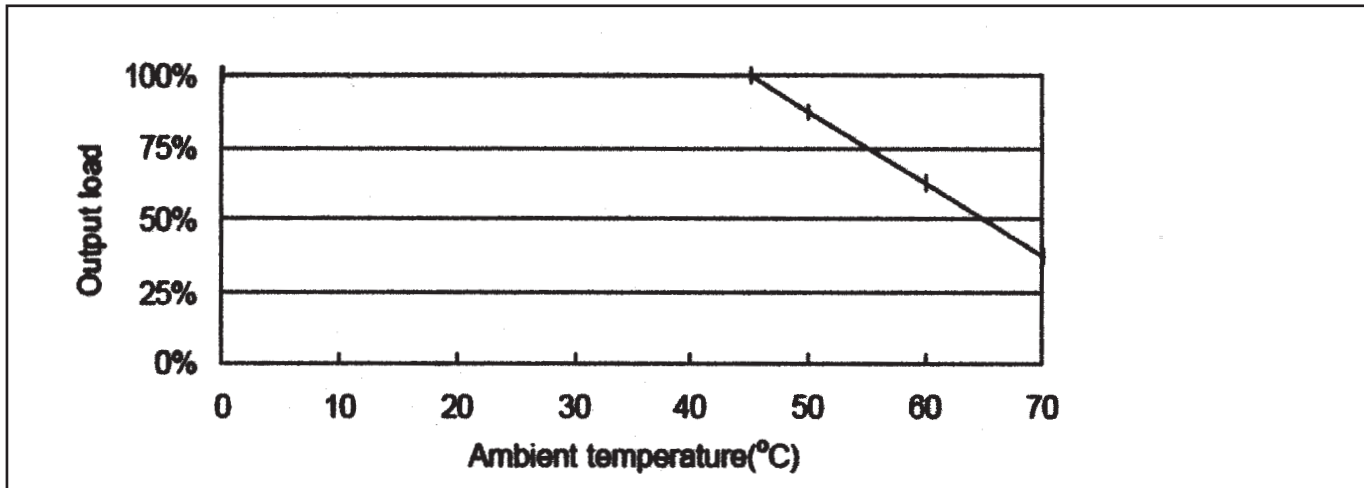
(1) Safety certified for 47 - 63Hz input only      (2) Measured with 0.1μF ceramic & 10μF electrolytic at 20MHz BW

**Model Selector**

| Model         | Output Voltage (V) | Maximum Output (A) | Peak Load (A) (1) | Efficiency (2) (typ)% |
|---------------|--------------------|--------------------|-------------------|-----------------------|
| ZPSA20-3R3 V1 | 3.3                | 4.4                | 6.6               | 74                    |
| ZPSA20-5 V1   | 5.0                | 4.4                | 6.6               | 77                    |
| ZPSA20-9 V1   | 9.0                | 2.4                | 4.0               | 80                    |
| ZPSA20-12 V1  | 12.0               | 1.8                | 2.7               | 80                    |
| ZPSA20-15 V1  | 15.0               | 1.4                | 2.1               | 80                    |
| ZPSA20-24 V1  | 24                 | 0.9                | 1.4               | 82                    |

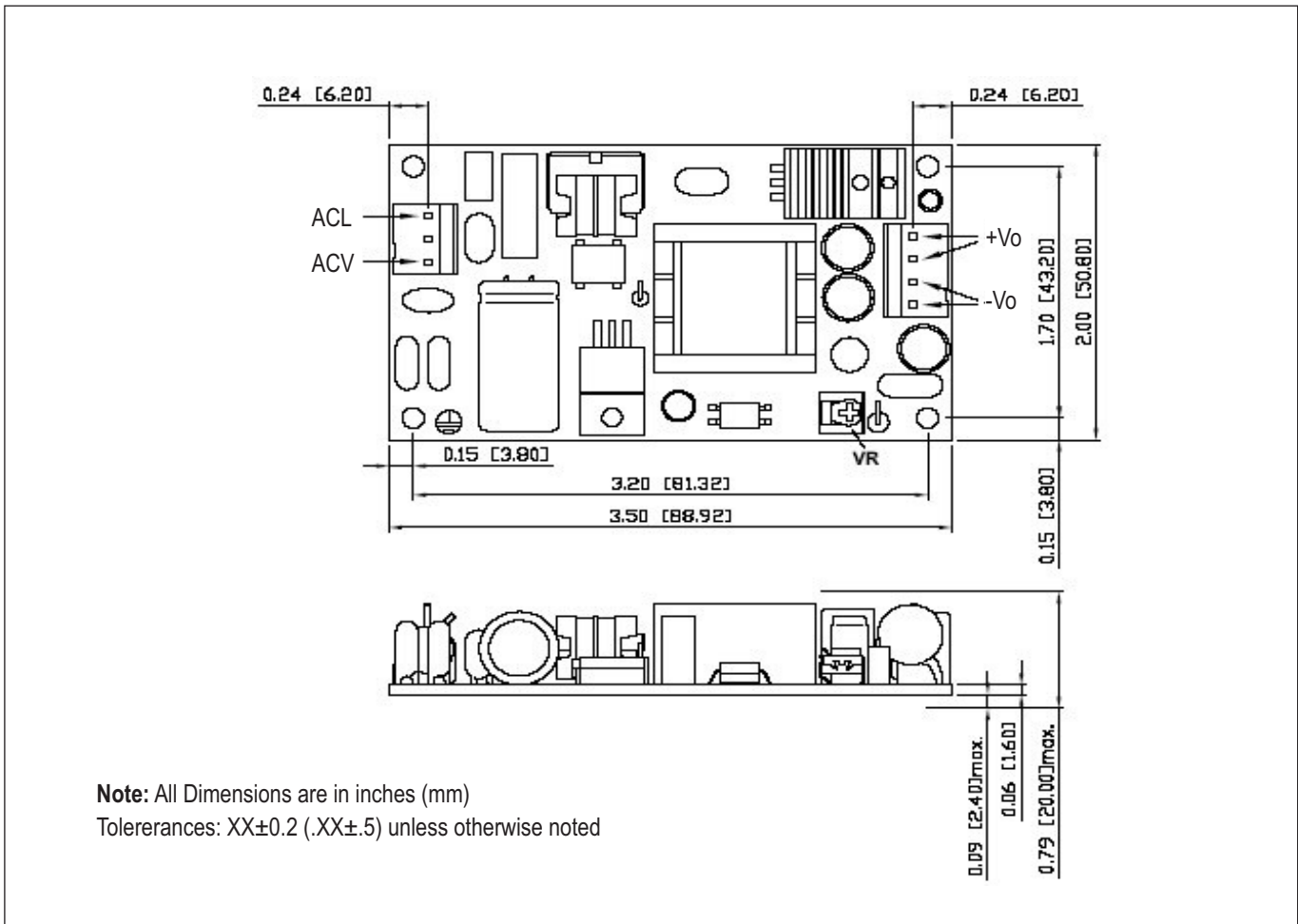
**Notes:** (1) Average not to exceed max power, <30s, 10% duty cycle (high line 240VAC)  
 (2) Preliminary Data

**Derating Curve ZPSA20 Series**



**INTERMEDIATE VOLTAGES AVAILABLE  
 PLEASE CONSULT SALES**

## Outline Drawing ZPSA20 Series



| Options                          |
|----------------------------------|
| Suffix                           |
| Add Suffix -P for PCB Mount Pins |



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