

- 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 Series

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

## ZPSA20 Features and Benefits

| Features | Benefits |
|---|---|
| • Industry Standard Footprint | • Available to Second Source |
| • Up to 82% efficiency | • Less System Heating |
| • Broad Product Range | • Optimization of Power Supply to System |
| • Meets EN61000-4 Immunity | • 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$^2$ (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour) |
| Shock | | - | < 196.1 m/s$^2$ (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 |

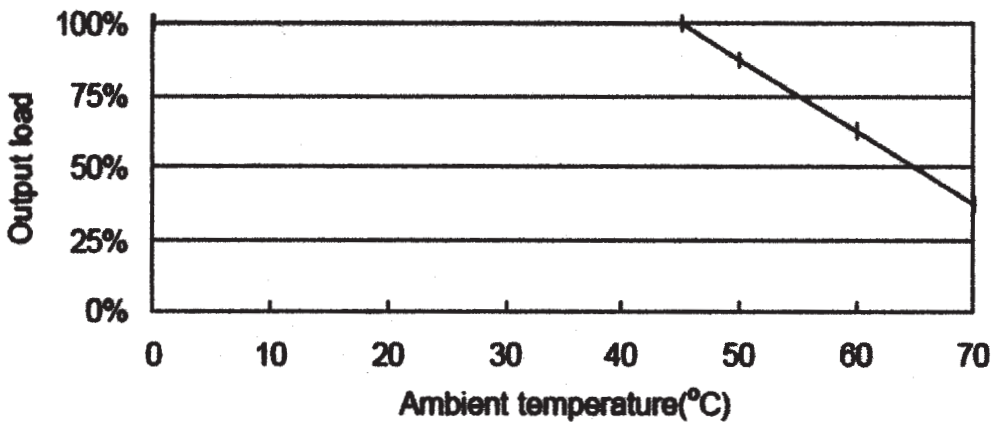
**Notes:**
(1) Safety certified for 47 - 63Hz input only (2) Measured with 0.1μF ceramic & 10μF electrolytic at 20MHz BW

## 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 |

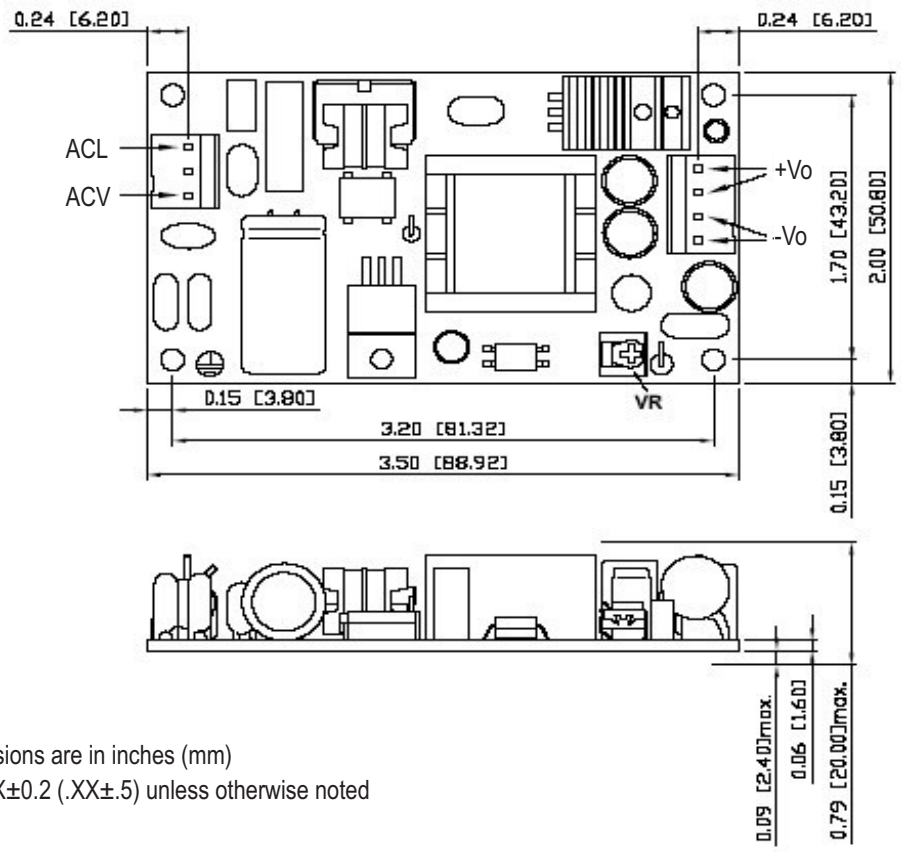
**Notes:** **(1)** Average not to exceed max power, <30s, 10% duty cycle (high line 240VAC)
**(2)** Preliminary Data

## Derating Curve ZPSA20 Series




**INTERMEDIATE VOLTAGES AVAILABLE**
**PLEASE CONSULT SALES**

## Outline Drawing ZPSA20 Series




**Note:** All Dimensions are in inches (mm)
Tolererances: XX±0.2 (.XX±.5) unless otherwise noted

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



**TDK-Lambda France SAS**
Tel: +33 1 60 12 71 65
tlf.fr.powersolutions@tdk.com
www.emea.lambda.tdk.com/fr



**Italy Sales Office**
Tel: +39 02 61 29 38 63
tlf.it.powersolutions@tdk.com
www.emea.lambda.tdk.com/it



**Netherlands**
tlf.nl.powersolutions@tdk.com
www.emea.lambda.tdk.com/nl



**TDK-Lambda Germany GmbH**
Tel: +49 7841 666 0
tlg.powersolutions@tdk.com
www.emea.lambda.tdk.com/de



**Austria Sales Office**
Tel: +43 2256 655 84
tlg.at.powersolutions@tdk.com
www.emea.lambda.tdk.com/at



**Switzerland Sales Office**
Tel: +41 44 850 53 53
tlg.ch.powersolutions@tdk.com
www.emea.lambda.tdk.com/ch



**Nordic Sales Office**
Tel: +45 8853 8086
tlg.dk.powersolutions@tdk.com
www.emea.lambda.tdk.com/dk



**TDK-Lambda UK Ltd.**
Tel: +44 (0) 12 71 85 66 66
tlu.powersolutions@tdk.com
www.emea.lambda.tdk.com/uk



**TDK-Lambda Ltd.**
Tel: +9 723 902 4333
tli.powersolutions@tdk.com
www.emea.lambda.tdk.com/il-en



**TDK-Lambda Americas**
Tel: +1 800-LAMBDA-4 or 1-800-526-2324
tla.powersolutions@tdk.com
www.us.lambda.tdk.com



**TDK Electronics do Brasil Ltda**
Tel: +55 11 3289-9599
sales.br@tdk-electronics.tdk.com
www.tdk-electronics.tdk.com/en



**TDK-Lambda Corporation**
Tel: +81-3-6778-1113
www.jp.lambda.tdk.com



**TDK-Lambda (China) Electronics Co. Ltd.**
Tel: +86 21 6485-0777
tlc.powersolutions@tdk.com
www.lambda.tdk.com.cn



**TDK-Lambda Singapore Pte Ltd.**
Tel: +65 6251 7211
tls.marketing@tdk.com
www.sg.lambda.tdk.com



**TDK India Private Limited, Power Supply Division**
Tel: +91 80 4039-0660
mathew.philip@tdk.com
www.sg.lambda.tdk.com

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