

## 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	0.25 / 0.12
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	16ms 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		-	UL60950, CSA60950, EN60950-1 Class 1, CE Mark (LVD)
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:

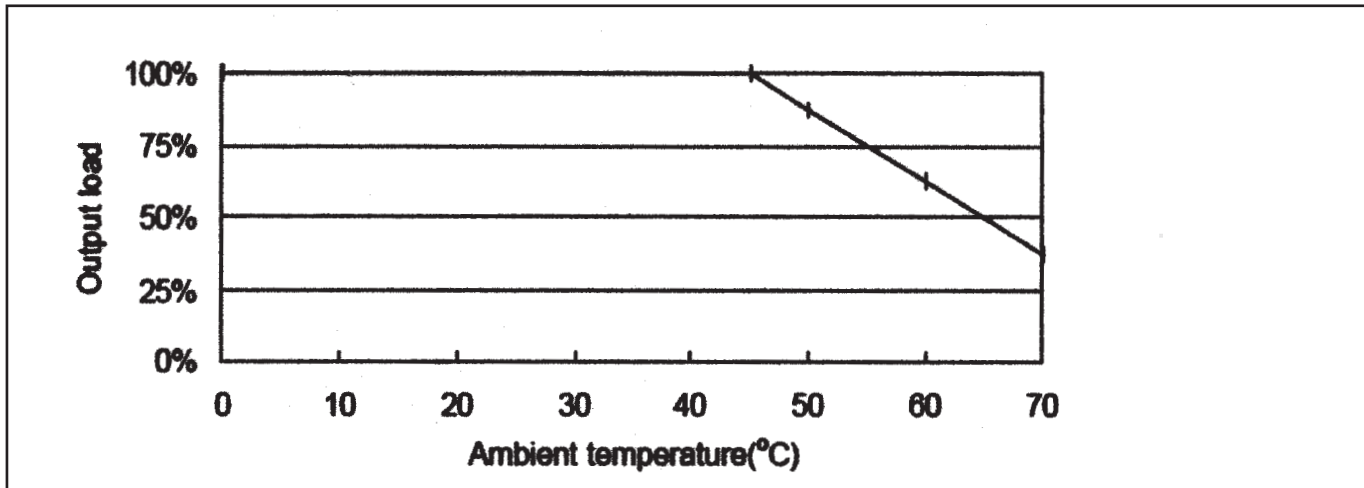
(1) Safety certified for 47 - 63Hz input only      (2) Measured with 0.1μF ceramic & 10μF electrolytic at 20MHz BW

**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

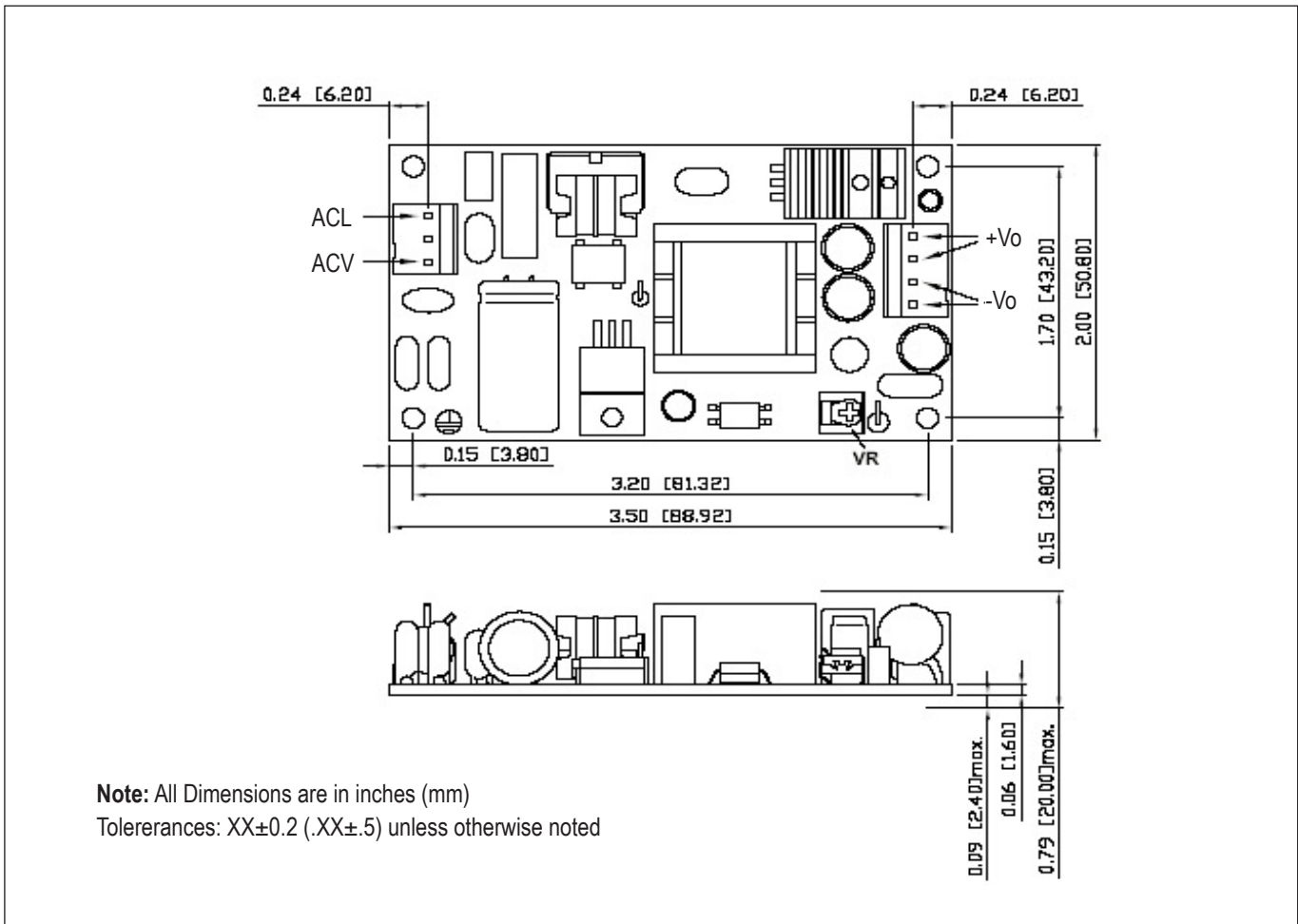
**Notes:** (1) Average not to exceed max power, <30s, 10% duty cycle  
 (2) Preliminary Data

**Derating Curve ZPSA20 Series**



**INTERMEDIATE VOLTAGES AVAILABLE  
 PLEASE CONSULT SALES**

## Outline Drawing ZPSA20 Series



Options
Suffix
Add Suffix -P for PCB Mount Pins

**TDK-LAMBDA EMEA**

[www.emea.tdk-lambda.com](http://www.emea.tdk-lambda.com)



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