



2 x 3.5" 20W AC-DC Power Supplies

RoHS

- ◆ Wide Range AC Input
- ◆ Low profile, Industry Standard Footprint
- ◆ Global Safety Agency Compliance

Key Market Segments & Applications

Video/Audio Routers
 Datacom
 Point of Sale
 Test and Measurement

Features and Benefits

Feature	Benefit
◆ Industry standard footprint	◆ Availability to second source
◆ Wide Range AC Input	◆ Global Operation
◆ Class B conducted EMI	◆ Reduced system filtering required

Specifications

ITEMS			ZPSA20
Input Voltage range	(1)	-	85 - 264VAC (47 - 440Hz) or 120 - 370VDC
Inrush Current	A	-	40A maximum 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)
Hold Up Time (Typ)	ms	-	8ms at 115VAC input
Temperature Coefficient	-	-	±0.05%/°C
Voltage Accuracy	-	-	±1%
Adjustment Range	-	-	None
Minimum Load	A	-	None
Load Regulation	-	-	±1% (10 - 100% load change)
Line Regulation	-	-	±0.5% (100 - 240VAC line change)
Ripple & Noise (2)	mV	-	1% or 50mV whichever is greater
Short Circuit Protection	-	-	Continuous - hiccup mode
Overvoltage Protection	V	-	110 - 130% of nominal (Zener clamp)
Efficiency	%	-	82% typical
LED Indicator	-	-	Green LED = OK
Operating Temperature	-	-	0 to +70°C derate linearly to 37.5% load from 45 to 70°C
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	-	-	>100M at 25C & 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 Certification	-	-	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark
Conducted & Radiated EMI	-	-	EN55022-B, FCC Class B
Immunity	-	-	EN61000-4-2, -3, -4, -5, -6, -8
Weight (Typ)	g	-	100g
Size (WxLxH)	mm	-	2 x 3.5 x 0.79 (including underside components)
Warranty	yr	-	One Year

(1) Safety certified for 47 - 63Hz input only

(2) Measured with 0.1uF ceramic & 10uF electrolytic at 20MHz BW

ZPSA20 Series

Model Selector

Model	Output (V)	Maximum Output (A)	Peak Load(A) (3)
ZPSA20-3R3	3.3	4.4	6.6
ZPSA20-5	5	4.4	6.6
ZPSA20-9	9	2.45	4.0
ZPSA20-12	12	1.8	2.7
ZPSA20-15	15	1.4	2.1
ZPSA20-24	24	0.92	1.4

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

Options

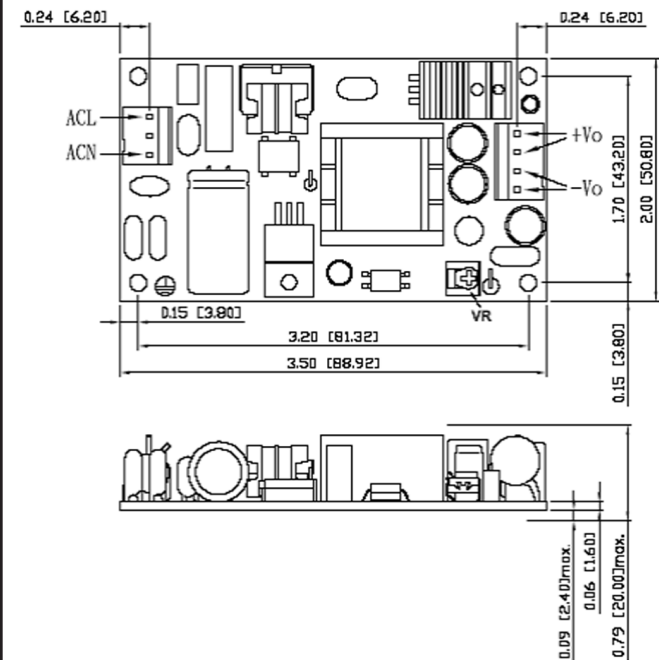
Suffix	Description
Blank	Molex connectors
/P	PCB mount pins

Other Lambda Industrial Products

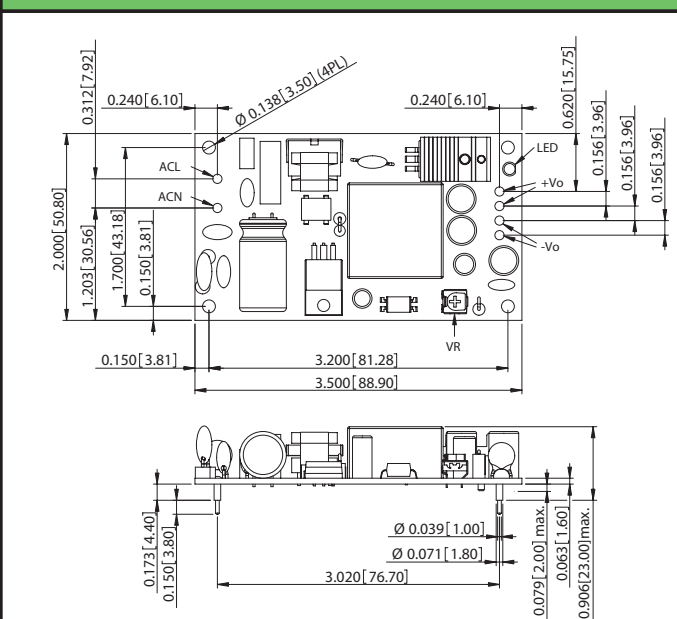
KPSA	5 - 15W pcb mount
KM	15 - 40W pcb mount medical
ZPSA/ZPD/ZPT	40 - 60W, single, dual and triple output
ZWS	5 - 240W single output

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

Outline Drawings (ZPSA20)



Outline Drawings (ZPSA20xx/P)



All Dimensions are in inches[mm]
 Tolerances Inches X.XXX +/-0.02
 Millimeters X.XX +/-0.5