ZPSA100 Series

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 - 63Hz) or 120 - 370VDC*				
Inrush Current	Α	25 / 50 (cold start)				
Input Current (115/230VAC)	Α	1.1 / 0.6				
Temperature Coefficient	-	±0.05%/°C				
Voltage Accuracy	-	±1%				
Minimum Load	Α	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				
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	-	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	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				

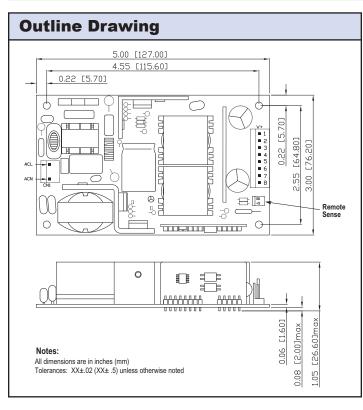
^{*}Safety certified for AC input only.

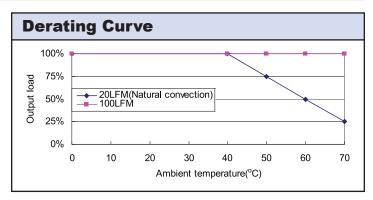
Notes:

(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%





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 https://product.tdk.com/en/power/

