



ZWD-PAF Series

100W to 440W Dual Output Power Supplies



- ◆ Universal Input (85 - 265VAC)
- ◆ Power factor Corrected
- ◆ 200% Peak Power capability on 24V output
- ◆ Individual output adjustment
- ◆ 2 year warranty

Key Market Segments & Applications

Factory Automation
Printers and motor drives
Kiosks

Features and Benefits

Feature	Benefit
◆ Input Transient Protected	◆ Withstands harsh environments
◆ Power Factor Corrected	◆ Supports Global Use
◆ 200% Peak Power capability	◆ Can drive high current start up or pulse loads

Specifications

MODEL		ZWD100PAF-0524	ZWD150PAF-0524	ZWD225PAF-0524
ITEMS				
Input Voltage	-	85-265VAC (47-63Hz), 120-370VDC		
Input Current (1)	A	1.3 / 0.65	1.9 / 0.97	2.81 / 1.43
Inrush Current (1)(2)	A	15 / 30		
Power Factor	-	0.99 at 100VAC, 0.95 at 200VAC, Meets EN61000-3-2		
Leakage Current	mA	0.75mA max		
Temperature Coefficient	-	<0.02%/°C		
Overcurrent Protection (3)	-	5V output: >105%, 24V output: >205%		
Overvoltage Protection (4)	V	120- 145%		
Hold Up Time (Typ) (1)	ms	5V output: 40ms, 24V output: 20ms		
Efficiency (2)	%	79 / 81	80 / 82	81 / 83
Remote On/Off	-	On 24V output only, remove jumper to shutdown		
Line Regulation	mV	5V output: 20mV, 24V output: 96mV		
Load Regulation	mV	5V output: 40mV, 24V output: 150mV		
Ripple & Noise	mV	5V output: 120mV, 24V output: 100W, 150mV; 150/225W, 240mV		
Operating Temperature	-	(Open frame or L bracket) -10°C to +70°C, derate linearly to 0% load from 50°C to 70°C		
Operating Temperature	-	(With /A cover option) -10°C to +60°C, derate linearly to 0% load from 40°C to 60°C		
Storage Temperature	-	-30 to +85°C		
Humidity (non condensing)	-	Operating: 20 - 90%RH, Non-operating: 10 - 95% RH		
Cooling	-	Convection cooled		
Withstand Voltage	-	I/P to Gnd 2kVAC (20mA), I/P to O/P 3kVAC (20mA), O/P to Gnd 500VAC (100mA) for 1 min.		
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC		
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s ² constant X, Y, Z 1 hour		
Shock	-	< 196.1 m/s ²		
Safety Agency Approvals	-	UL60950, CSA60950, EN60950, EN50178, CE Mark		
Conducted & Radiated EMI	-	EN55022-B, FCC Class B, VCCI-B		
Recommended EMI Filter	-	MAW1203-22	MAW1205-22	MAW1205-22
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11		
Weight (Typ)	g	460 (780 with cover)	530 (885 with cover)	670 (1065 with cover)
Size (WxHxD)	in	2.95 x 8.74 x 1.38	3.35 x 8.74 x 1.57	3.74 x 8.74 x 1.77
Warranty	yrs	Two Years		

Notes: See installation manual for full specification.

(1) 100/200VAC

(2) 25°C ambient (cold start)

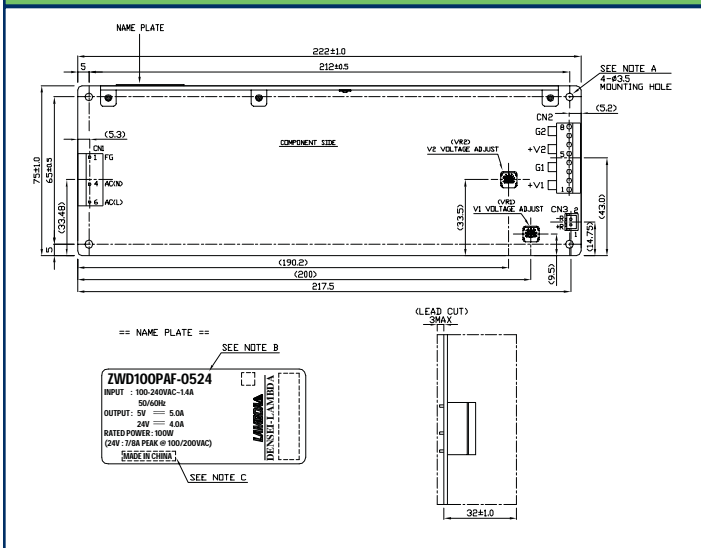
(3) Avoid prolonged operation in overload

(4) OVP on 24V output will shutdown 24V output only

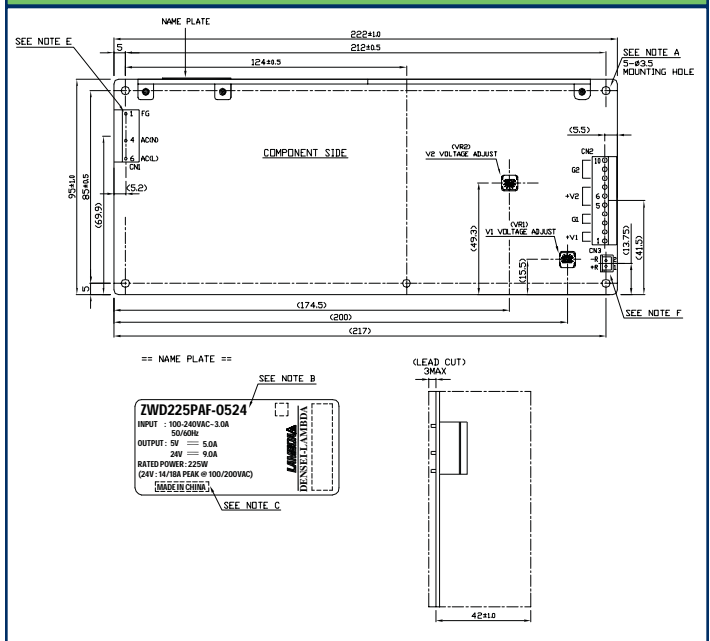
Model Selector

Model	Output Voltage	Output Voltage Accuracy	Output Adjust Range	Max Current	Peak ^{1,5} Current	Peak ^{1,5} Power	Max Average Power	Total ^{1,5} Peak Power
ZWD100PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	100W	172 / 196W
	24V	23.52 - 24.48V	22.8 - 27.6V	4A	7 / 8A	168 / 192W		
ZWD150PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	150W	246 / 294W
	24V	23.52 - 24.48V	22.8 - 27.6V	6A	10 / 12A	240 / 288W		
ZWD225PAF-0524	5V	4.9 - 5.1V	4.5 - 5.5V	5A	-	-	225W	344 / 440W
	24V	23.52 - 24.48V	22.8 - 27.6V	9A	14 / 18A	336 / 432W		

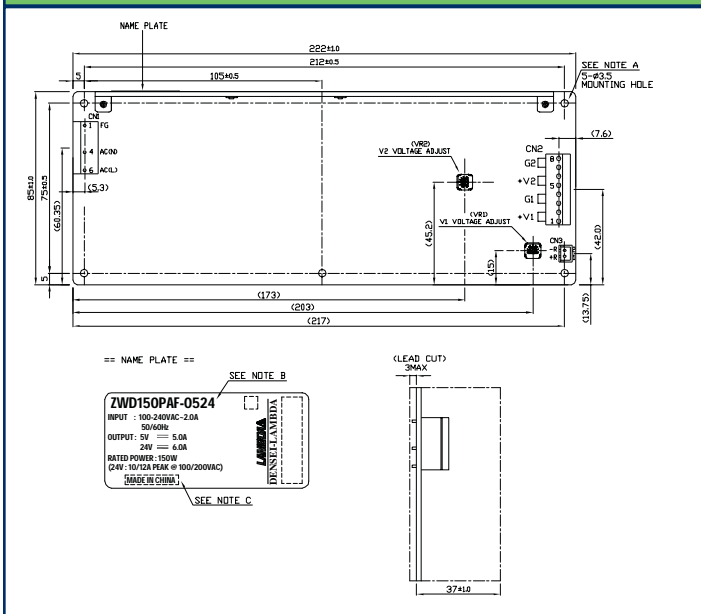
ZWD100 Outline Drawing



ZWD225 Outline Drawing



ZWD150 Outline Drawing



Options

Suffix	Description
blank	Molex Input & Output Connector
/L	L Bracket
/A	Cover & L Bracket
/J	JST Input & Output Connector
/T	Vertical Mount Screw Terminals
Preferred option combination: blank, /L, /TL, or /TA	
Example: ZWD100PAF-0524/TA	

Other Lambda Industrial Products

ZWS, ZWSPAF	5-480W Single output, 115/230VAC input
JWS, JWS-P, JWT	50-600W Single and triple output
SWS	50-600W Single output low cost
VSB, VSC, VSP	10-288W Single output 115VAC input

For Additional Information, please visit
www.lambdapower.com/products/zwd-paf-series.htm

Notes:

- (5) ZWS100PAF: For <10s max, duty cycle ≤0.35
 ZWS150PAF: Up to 10A peak, <10s max, duty cycle ≤0.35; from 10-12A, <5s, duty cycle ≤0.2
 ZWS225PAF: Up to 14A peak, <10s max, duty cycle ≤0.35; from 14-18A, <5s, duty cycle ≤0.2