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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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TDK·Lambda

ZWS-AF Series

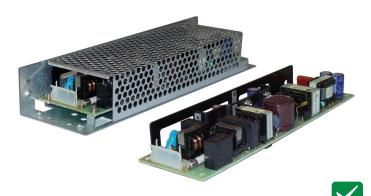
50W to 150W Single Output Low Cost, Worldwide Use

Features

- Universal Input (85 265VAC)
- Power factor Corrected
- Input transient protected
- 2 year warranty
- High quality design
- Peak Power capability

Key Market Segments & Applications





Specifications					
Model		ZWS50AF	ZWS75AF	ZWS100AF	ZWS150AF
AC Input Voltage range	VAC		85-265VAC (47-63Hz)		
DC Input Voltage range	VDC		120-370VDC		
Input Current (Typ) (1)	Α	0.8/0.4	1.2/0.6	1.4/0.7	2.0/1.0
Inrush Current	A		14/28 25°C Am	bient, Cold Start	
Power Factor (1)	-		Meets EN61000-3-2 (0.99/0.95)		
Maximum Ripple and Noise	mV	3.3	3.3 & 5V: 120mV; 12 to 24V: 150mV; 36 & 48V: 200mV		
Temperature Coefficient	-	<0.02%/°C			
Overcurrent Protection (4)	-	>105% of Peak Current Capability			
Hold Up Time (Typ) (1)	ms	20ms			
Leakage Current	-	0.5mA max 0.1mA (Typ) at 100VAC 0.16mA (Typ) at 230VAC			
Remote On / Off	-	See installation manual (Not available with /A cover option)			
Operating Temperature	-	Convection cooling - See table on page 2			
		0.7m/s air -10°C to +70°C, derate linearly to 70% load from 60°C to 70°C (2)			60°C to 70°C (2)
Storage Temperature	-	-30° to +85°C			
Humidity (non condensing)	-	Operating: 30 - 90% RH, storage 10-95% RH			
Withstand Voltage	-	I/P~Grnd 2kVAC (20mA), I/P~O/P 3kVAC (20mA), O/P~Grnd 500VAC (100mA) for 1 min			
Isolation Resistance	-	>100M at 25C & 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	-	UL60950-1, CSA60950-1, EN60950-1, EN50178, CE Mark			
Conducted & Radiated EMI	-	designed to meet EN55011, EN55022-B, FCC Class B, VCCI-B			
Immunity	-	designed to meet EN61000-4-2,-3,-4,-5,-6,-8,-11			
Weight (Typ)	g	210	290	380	500
Size (W x H x D)	mm	55 x 26 x 195	55 x 32 x 222	62 x 35 x 222	75 x 40 x 222
Warranty	yrs	Two Years			

Notes:

(1) 100/200VAC

(2) ZWS150AF -10 to 60°C, derate linearly to 70% load from 50°C to 60°C
(3) The peak current draw must not exceed a 10 second duration with a duty cycle of 35%

(4) Constant current limit with automatic recovery. Do not operate in a over-load or shorted output condition for more than 30 seconds.
 (5) An overvoltage condition on the output will shut down the power supply. The power supply must be re-set by cycling the AC input.

For New Designs, See ZWSBAF Series

ZWS-AF Series

Model Se	lecto	r								
Model	Voltage	Output Adjust Range (V)	Max Curr. (A)	Max Peak Curr. (A) ³	Max Output Power (W)	Peak Output Power ³ (W)	Eff. (%)	Max Load Reg.(mV)	Max Line Reg.(mV)	OVP (V)⁵
ZWS75AF3	3.3V	2.85-3.63	15.0	-	49.5	-	67	40	20	3.79-4.95
ZWS100AF3	3.3V	2.85-3.63	20.0	-	66.0	-	69	40	20	3.79-4.95
ZWS150AF3	3.3V	2.97-3.63	30.0	-	99.0	-	74	40	20	3.79-4.95
ZWS50AF5	5V	4.5-5.5	10.0	-	50.0	-	75	40	20	5.75-7.0
ZWS75AF5	5V	4.5-5.5	15.0	-	75.0	-	75	40	20	5.75-7.0
ZWS100AF5	5V	4.5-5.5	20.0	-	100.0	-	75	40	20	5.75-7.0
ZWS150AF5	5V	4.5-5.5	30.0	-	150.0	-	77	40	20	5.75-7.0
ZWS50AF12	12V	10.8-13.2	4.3	5.2	51.6	62.4	78	96	48	13.8-16.2
ZWS75AF12	12V	10.8-13.2	6.3	7.5	75.6	90.0	78	96	48	13.8-16.2
ZWS100AF12	12V	10.8-13.2	8.5	10.0	102.0	120.0	79	96	48	13.8-16.2
ZWS150AF12	12V	10.8-13.2	12.5	15.0	150.0	180.0	79	96	48	13.8-16.2
ZWS50AF15	15V	13.5-16.5	3.5	4.2	52.5	63.0	79	120	60	17.3-20.3
ZWS75AF15	15V	13.5-16.5	5.0	6.0	75.0	90.0	79	120	60	17.3-20.3
ZWS100AF15	15V	13.5-16.5	6.7	8.0	100.5	120.0	79	120	60	17.3-20.3
ZWS150AF15	15V	13.5-16.5	10.0	12.0	150.0	180.0	81	120	60	17.3-20.3
ZWS50AF24	24V	21.6-26.4	2.1	2.6	50.4	62.4	81	150	96	27.6-32.4
ZWS75AF24	24V	21.6-26.4	3.2	3.8	76.8	91.2	82	150	96	27.6-32.4
ZWS100AF24	24V	21.6-26.4	4.3	5.0	103.2	120.0	81	150	96	27.6-32.4
ZWS150AF24	24V	21.6-26.4	6.3	7.5	151.2	180.0	82	150	96	27.6-32.4
ZWS75AF36	36V	32.4-39.6	2.1	2.5	75.6	90.0	82	200	144	41.4-48.6
ZWS100AF36	36V	32.4-39.6	2.8	3.4	100.8	122.4	82	200	144	41.4-48.6
ZWS150AF36	36V	32.4-39.6	4.2	5.0	151.2	180.0	82	200	144	41.4-48.6
ZWS75AF48	48V	43.2-52.8	1.6	1.9	76.8	91.2	82	240	192	55.2-64.8
ZWS100AF48	48V	43.2-52.8	2.1	2.5	100.8	120.0	82	240	192	55.2-64.8
ZWS150AF48	48V	43.2-52.8	3.2	3.8	153.6	182.4	82	240	192	55.2-64.8

Other Industrial Products			
VSB/VSC	5W-150W Single output 115VAC input		
SC	30W-120W Single, dual & triple output		
HWS	15W-1500W Single output		
ZWSPAF	150W-480W Peak power, single output		
ZWD, ZWQ	100W-440W Dual and quad output		

Derating	- Conv	ection	n Cool	ing	
Model	40°C	45°C	50°C	55°C	60°C
ZWS50AF	100%	100%	100%	85%	70%
ZWS75AF	100%	100%	100%	85%	70%
ZWS100AF	100%	100%	100%	80%	60%
ZWS150AF	100%	87%	75%	62%	50%

Options		
Suffix	Description	
-	Molex Input & Output Connectors	
/A	With cover & L Bracket	
/J	JST Input & Output Connectors*	
/JA	JST Connectors & Cover	
* Recommended for new designs		

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

