

ZPSA100 Series

3" x 5" 100W AC-DC
Power Supplies

- PFC
- 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 Information Displays

ZPSA100 Features and Benefits

Features

- Industry Standard Footprint
- Up to 90% efficiency
- Broad Product Range
- Meets EN61000-4 Immunity
- Low Profile

Benefits

- Available to Second Source
- Less System Heating
- Optimization of Power Supply to System
- Greater Reliability

Specifications

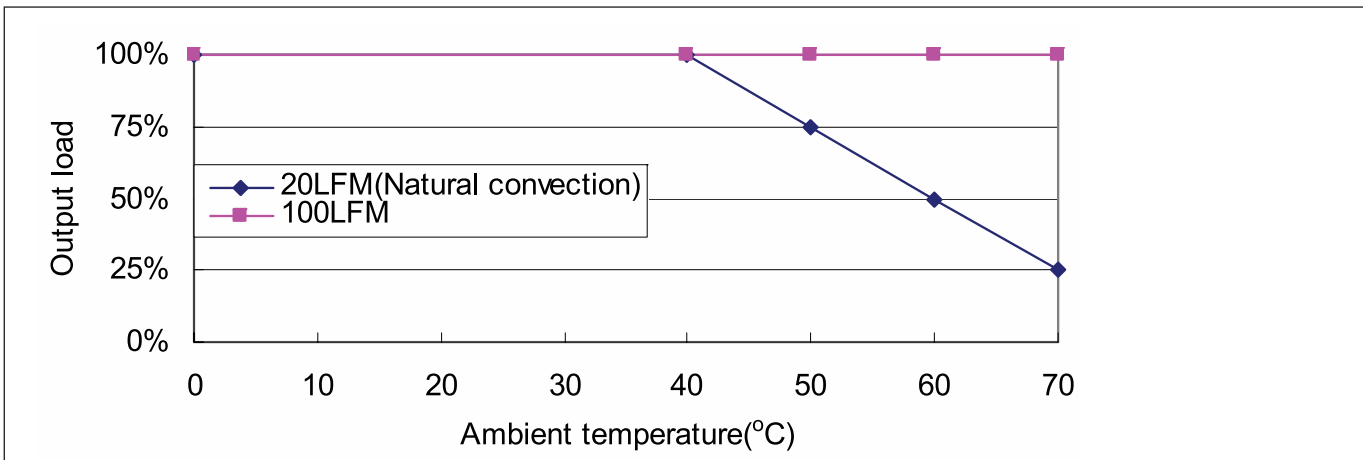
ITEMS		MODEL	ZPSA100
Input Voltage range	-	-	90 - 264VAC (47 - 440Hz) or 120 - 370VDC
Inrush Current	A	A	25 / 50 (cold start)
Input Current (115/230VAC)	A	A	1.1 / 0.6
Temperature Coefficient	-	-	±0.05%/°C
Voltage Accuracy	-	-	±1%
Minimum Load	A	A	None
Load Regulation	-	-	±1%
Line Regulation	-	-	±0.5%
Ripple & Noise (1)	mV	mV	1% (for 5V, 2% or 50mV whichever is greater)
Short Circuit Protection	-	-	Foldback
Overvoltage Protection	V	V	Typically 110-130% of nominal, auto recovery
Hold Up Time (Typ)	ms	ms	16ms at 115VAC input
Operating Temperature	°C	°C	0 to +70°C with derating/air flow
Storage Temperature	°C	°C	-20 to +85°C
Humidity (non condensing)	-	-	10 - 95% RH
Cooling (2)	-	-	Convection/air flow
Withstand Voltage	-	-	Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.
Isolation Resistance	-	-	>100MΩ 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 Approvals	-	-	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	g	385
Size (WxLxH)	mm	mm	127 X 76.2 X 26.6 (including underside components)
Warranty	yrs	yrs	2

Notes:

(1) 5V measured with 0.1μF ceramic & 220μF electrolytic at 20MHz BW, all other models measured with 0.1μF & 10μF ceramic electrolytic at 20MHz BW.
(2) 70°C operating with 100LFM air flow.

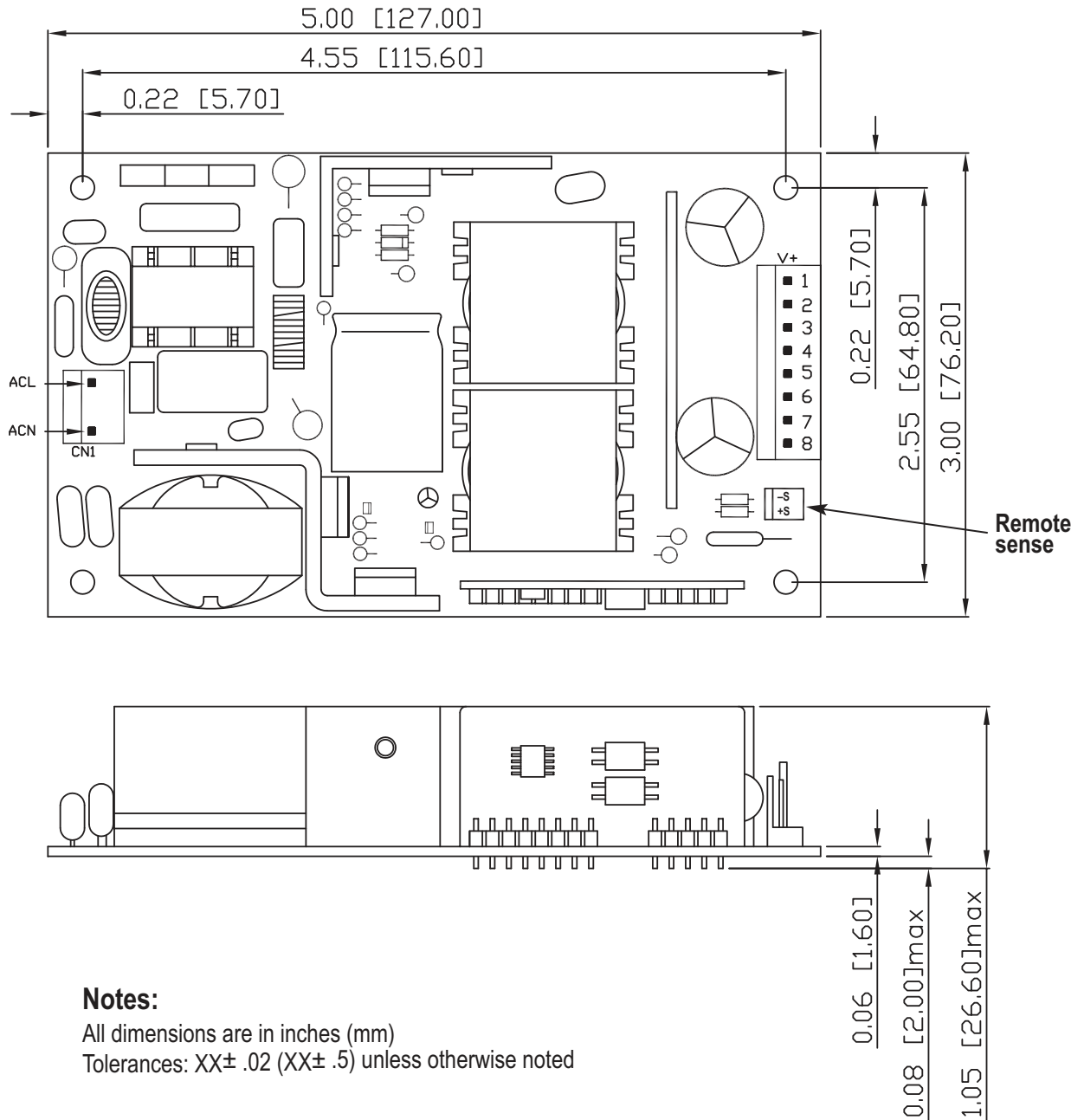
Model Selector							
Model	Output Voltage (V)	Maximum Load (A)	Minimum Load (A)	Ripple and Noise	Voltage Accuracy	Line Regulation	Load Regulation
ZPSA100-5	5V	20A	0A	2%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-9	9V	11.2A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-12	12V	8.4A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-15	15V	6.7A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-18	18V	5.6A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-24	24V	4.2A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%
ZPSA100-48	48V	2.1A	0A	1%	+/- 1%	+/- 0.5%	+/- 1%

Derating Curve ZPSA100 Series



**INTERMEDIATE VOLTAGES AVAILABLE
PLEASE CONSULT SALES**

Outline Drawing ZPSA100 Series



PIN Assignments

Pin#	Function
1	Vout (+)
2	Vout (+)
3	Vout (+)
4	Vout (+)
5	Vout (-)
6	Vout (-)
7	Vout (-)
8	Vout (-)

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



TDK-Lambda France SAS

Tel: +33 1 60 12 71 65
 tlf.fr.powersolutions@tdk.com
 www.emea.lambda.tdk.com/fr



Italy Sales Office

Tel: +39 02 61 29 38 63
 tlf.it.powersolutions@tdk.com
 www.emea.lambda.tdk.com/it



Netherlands

tlf.nl.powersolutions@tdk.com
 www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Tel: +49 7841 666 0
 tlg.powersolutions@tdk.com
 www.emea.lambda.tdk.com/de



Austria Sales Office

Tel: +43 2256 655 84
 tlg.at.powersolutions@tdk.com
 www.emea.lambda.tdk.com/at



Switzerland Sales Office

Tel: +41 44 850 53 53
 tlg.ch.powersolutions@tdk.com
 www.emea.lambda.tdk.com/ch



Nordic Sales Office

Tel: +45 8853 8086
 tlg.dk.powersolutions@tdk.com
 www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66
 tlu.powersolutions@tdk.com
 www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel: +9 723 902 4333
 tli.powersolutions@tdk.com
 www.emea.lambda.tdk.com/il-en



TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324
 tla.powersolutions@tdk.com
 www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599
 sales.br@tdk-electronics.tdk.com
 www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation

Tel: +81-3-6778-1113
 www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777
 tlc.powersolutions@tdk.com
 www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211
 tfs.marketing@tdk.com
 www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660
 mathew.philip@tdk.com
 www.sg.lambda.tdk.com

