

- Full Power to 85°C with Airflow
- Industry Standard Package and Pin Out Options
- Low Voltage Outputs to 0.9V
- Output Currents up to 15A on all models
- 5V Inputs
- Wide Output Voltage Adjustment
- Remote On / Off
- Remote Sense
- Customer Selectable Outputs
- Parallel Capability

PL15 (Tarka) Series

15 Amp, Non-Isolated DC-DC Converters

Key Market Segments & Applications

Distributed Power Architecture
Point Of Load
Intermediate Bus Architectures

PL15 (Tarka) Series Features and Benefits

Features

- ◆ High Efficiency up to 95%
- ◆ Excellent transient response
- ◆ 0.9 - 3.3VDC Adjustment Range
- ◆ Parallel capable
- ◆ Full Power to 70°C with convection cooling

Benefits

- ◆ Reduced input current draw
- ◆ No expensive external capacitors required
- ◆ Stock one part for all voltages
- ◆ Scalability
- ◆ Simple Thermal Management

Specifications

ITEMS	MODELS		PL15S 05
	(1)	VDC	
Input Voltage Range	(1)	VDC	3.3 - 5.5VDC
Turn on/off Threshold (typ)		VDC	On: 2.95V, Off 2.9V
Output Voltage Accuracy		%	±1
Voltage Trim Range		VDC	0.9 - 3.3
Ripple & Noise	(2)	mV	22-40mV (depending on output voltage)
Line Regulation (typ)	(2)	mV	5-10mV (output voltage dependent)
Load Regulation (typ)	(2)	mV	8-15mV (output voltage dependent)
Transient Response	-	-	100mV deviation, 50us settling time (typ) for 50%-100% or 100%-50% load change
Overcurrent Protection (OCP) A	A	15A	30A max
Overvoltage Protection (OVP)	-	-	N/A
Remote Sense / Parallel	-	-	Optional - see Model Selector (Parallel uses external load share controller)
Remote On / Off	-	-	Low or Short = off, High or Open = On
Operating Temperature	-	-	-40°C to +85°C
Operating Humidity	-	-	20 - 95% Non condensing
Storage Temperature	-	-	-65°C to +150°C
Storage Humidity	-	-	10 - 95% Non condensing
Cooling	-	-	Convection or forced air
Vibration (non operating)	-	-	10 - 55Hz (1 minute), amplitude 0.825mm (49m/s ² max), X, Y, Z 1 hour each
Shock	-	-	196.1 m/s ²
Safety Agency Approvals	-	-	UL1950, CSA950, EN60950
Weight		g	9
Size (WxHxD)		mm(in)	9.4 x 50.8 x 12.7 (0.37 x 2 x 0.5)
Switching Frequency		kHz	230 - 340
Warranty		-	2 Years
Calculated MTBF	(3)	Hours	6.9 Million

Notes (1) Minimum input voltage = 3 at 2.5V output

(2) For details of specific output voltages, please refer to application manual

(3) using Bellcore (V3.1 - Bell4 or V3.1 Bell3, Ta=25°C Full Power

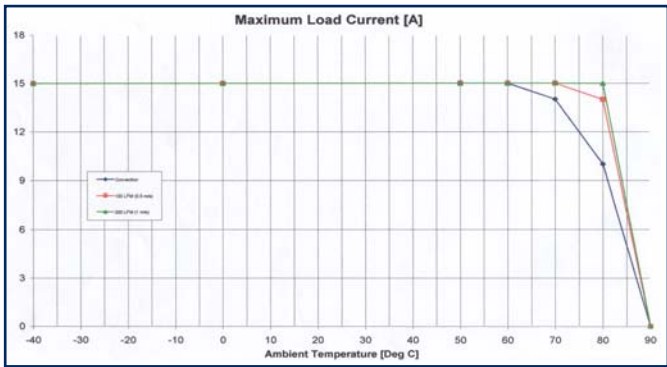
See Installation Manual for full details, test methods of parameters and application notes

Model Number Scheme						
PL	15 Max. Output Current	S Single Output	05 Nominal Input Voltage	C (* , **)	TP TP= (+) Remote sense (10 Pin)	K Package Type K=Box tray
* C=Customer selectable output voltage or requested factory set voltage. e.g. 0V9=0.9V Requires a fixed value resistor to set required output voltage. Please refer to Application Notes Sample Model Number: PL15S-05-C-TP-K						
** Output can be factory set at no extra cost. When ordering add output value here: 1V8 for 1.8 volts						

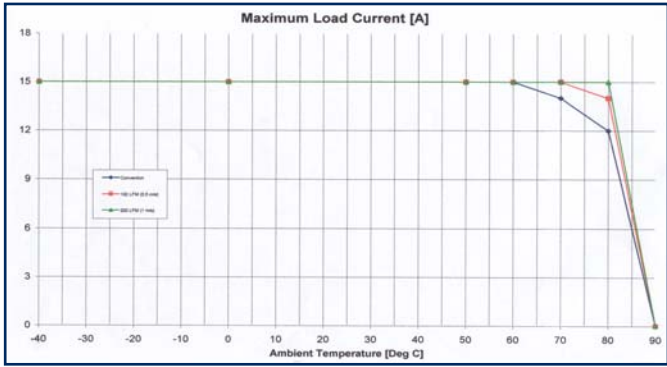
Models				
Model	Output Voltage	Max Out. Cur. (A)	Max Out. Pwr (W)	Full Load Eff.
PL15S-05-C-TP-K	Selectable	15	49.5	-
PL15S-05-0V9-TP-K	0.9	15	13.5	81%
PL15S-05-1V0-TP-K	1.0	15	15	82%
PL15S-05-1V2-TP-K	1.2	15	18	84%
PL15S-05-1V5-TP-K	1.5	15	22.5	88%
PL15S-05-1V8-TP-K	1.8	15	27	89%
PL15S-05-2V0-TP-K	2.0	15	30	90%
PL15S-05-2V5-TP-K	2.5	15	37.5	92%
PL15S-05-3V3-TP-K	3.3	15	49.5	94%

Pinout	
PIN	TP Version
1	Vout
2	Vout
3	+RS
4	Vout
5	GND
6	GND
7	Vin
8	Vin
9	Trim
10	On/Off

PL15 Derating Curves

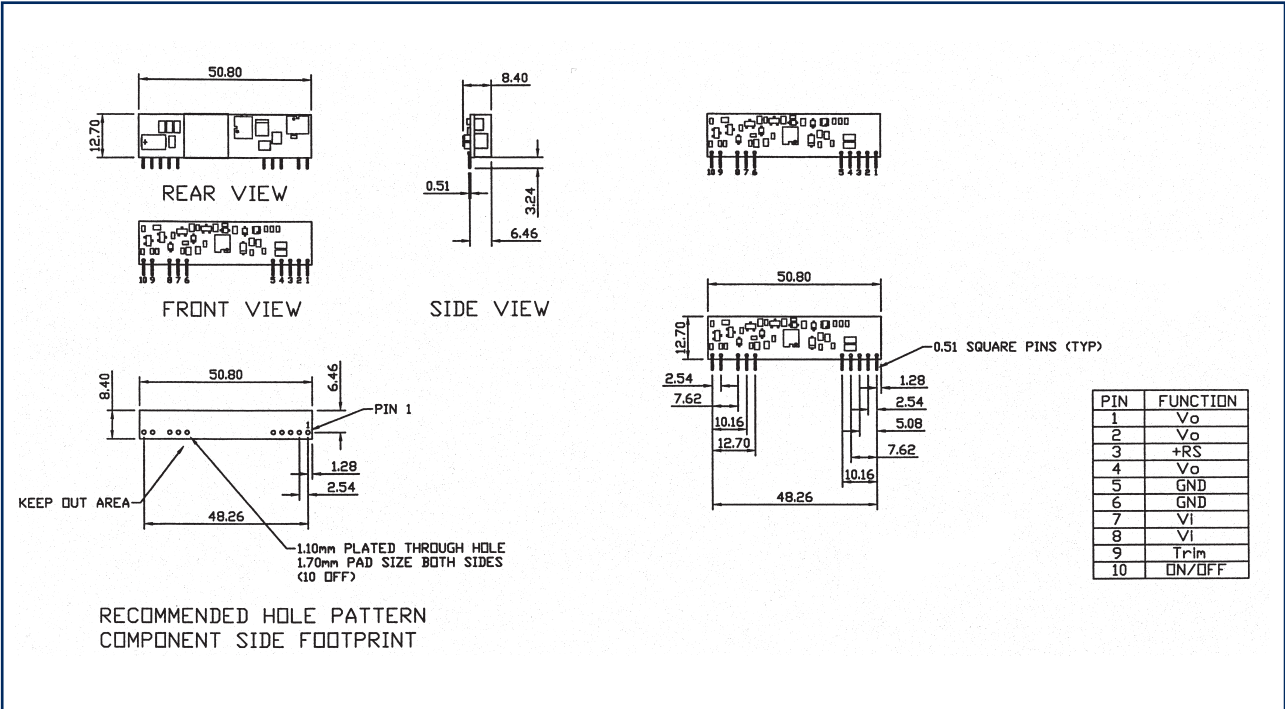


PL15S-05-0.9 Derating Curve



PL15S-05-1V5 Derating Curve

PL15 Outline Drawings



Detailed specifications of the PL15 including de-rating, transient, turn-on, short circuit and efficiency curves can be found on the PL15 long-form datasheet. Contact Lambda UK or visit www.lambda-europe.com/tarka-pl.htm

LAMBDA EMEA

AUSTRIA

LAMBDA ELECTRONICS GmbH
Aredstraße 22
A-2544 Leobersdorf

Telephone: +43 (0) 2256 655 84
Facsimile: +43 (0) 2256 645 12
www.lambda-austria.com

FRANCE

LAMBDA SAS
ZAC des Delaches, BP1077 - Gometz le Chatel
91940 Les Ulis

Telephone: +33 (0) 1 60 12 71 65
Facsimile: +33 (0) 1 60 12 71 66
Web: www.lambda-f.com

GERMANY

LAMBDA GmbH
Karl-Bold-Straße 40
D-77855 Achern

Telephone: +49 (0) 78 41 666 0
Facsimile: +49 (0) 78 41 5000
Web: www.lambda-germany.com

ISRAEL

NEMIC LAMBDA LTD
Kibbutz Givat
Hashlosha 48800

Telephone: +972 (0) 3 902 4333
Facsimile: +972 (0) 3 902 4777
Web: www.nemic.co.il

ITALY

LAMBDA s.r.l.
Via dei Laboratori 128/130,
20092, Cinisello Balsamo (Mi)

Telephone: +39 (0) 02 61 29 38 63
Facsimile: +39 (0) 02 61 29 09 00
Web: www.lambda-italy.com

SWEDEN

LAMBDA SCANDINAVIA
PO Box 546, Rallarvägen 41
SE-184 25. Akersberga

Telephone: +46 (0) 8 598 94 090
Facsimile: +46 (0) 8 540 66 096
Web: www.lambda-scandinavia.com

UK

LAMBDA UK
Kingsley Avenue
Ilfracombe Devon EX34 8ES

Telephone: +44 (0) 1271 856666
Facsimile: +44 (0) 1271 864894
Web: www.lambda-gb.com

LAMBDA NORTH AMERICA

visit www.lambda-power.com for a list of Lambda offices and distributors

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visit www.densei-lambda.com for a list of Lambda offices and distributors

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