



Single & Dual Output 15W DC-DC Converters

- ◆ Industry Standard 1" x 1" Footprint
- ◆ Through Hole
- ◆ Agency Approved

RoHS

Key Market Segments & Applications

Telecom	Datacom
Point of Load	Process Control

Features and Benefits

Feature	Benefit
◆ 1" x 1" footprint	◆ Can replace older 2x1" models
◆ Wide range input (PXB15-xxW)	◆ Less parts to inventory
◆ Six sided shielding	◆ Reduced radiated noise

Specifications

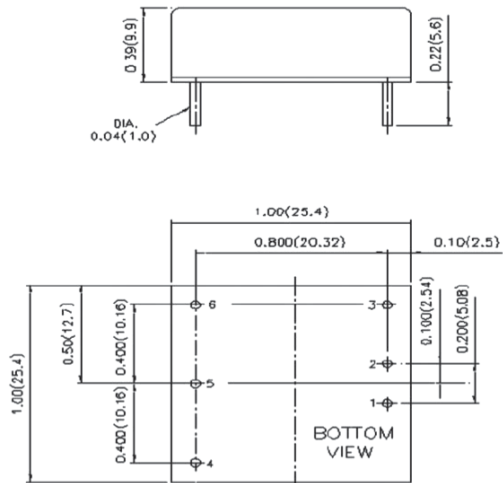
ITEMS		PXB15-xxS	PXB15-xxWS	PXB15-xxD	PXB15-xxWD
Max Output Power	W	15W			
Voltage Accuracy	%	±1%			
Voltage Adjustment (T Suffix)	%	±10%		n/a	
Minimum Load	-	None		25% each output	
Line Regulation	%	±0.2%		±0.5%	
Load Regulation (0% to 100%)	%	±0.2%		±1.0%	
Start up time	ms	30ms			
Remote on/off	-	Negative Logic /N (standard): ON: Short or <1.2V, OFF: Open or 3-15V Positive Logic /P (optional): ON: Open or 3-15V, OFF Short or <1.2V			
Temperature Coefficient	°C	<±0.02%/°C			
Operating Temperature	°C	-40 to +85oC (See derating curves)			
Maximum Case Temperature	°C	105°C			
Storage Temperature	°C	-55 to 125°C			
Thermal Shock	-	MIL-STD-810F			
Relative Humidity (non condensing)	%	5 to 95%			
Transient Response (25% step load change)	µs	250µs recovery			
Overvoltage Protection (Zener clamp)	VDC	3.3V (3.7-5.4); 5V (5.6-7.0); 12V (13.5-19.6); 15V (16.8-20.5)			
Overcurrent and Short Circuit Protection	-	Typically at 150%, hiccup with self recovery			
Input Surge Voltage (Maximum for 100ms)	VDC	12V input: 36V, 24V input: 50V, 48V input: 100V			
Reflected input ripple (peak to peak)	mA	30mA			
Isolation Voltage (Input to Output)	VDC	1600VDC minimum			
Isolation Voltage I/P to Case , O/P to Case	VDC	1000VDC minimum			
Isolation Resistance	Ω	109 Ohms minimum			
Isolation Capacitance (max)	pF	1000pF			
Typical Switching Frequency (Fixed)	Hz	400kHz			
MTBF (BELLCORE TR-NWT-000332)	Hours	1,330,000			
Vibration	-	MIL-STD-810F			
Conducted and Radiated Emissions	-	EN55022 Level A			
Immunity	-	EN61000-4-2,-3,-4,-5,-6			
Safety Agency Approval	-	IEC60950-1, UL60950-1, EN60950-1, CE Mark			
Size (L x W x H)	inches	1 x 1 x 0.39"			
Mounting	-	Through Hole			
Weight	g	15			
Warranty	yrs	Two Years			

Notes:
See installation manual

Model Selector

Output Voltage (VDC)	Output Current (A)	Output Power (W)	Input Voltage (VDC)	Model	Ripple & Noise (Pk-Pk mV)	Nominal Input Current (mA)	Efficiency (%)	Maximum Load Capacitance (uF)
3.3	4	13.2	9 - 18	PXB15-12S3P3/NT	75	1375	84	1000
3.3	4	13.2	9 - 36	PXB15-24WS3P3/NT	75	688	86	1000
3.3	4	13.2	18 - 36	PXB15-24S3P3/NT	75	671	86	1000
3.3	4	13.2	18 - 75	PXB15-48WS3P3/NT	75	336	86	1000
3.3	4	13.2	36 - 75	PXB15-48S3P3/NT	75	336	86	1000
5	3	15	9 - 18	PXB15-12S05/NT	75	1524	86	1000
5	3	15	9 - 36	PXB15-24WS05/NT	75	762	86	1000
5	3	15	18 - 36	PXB15-24S05/NT	75	763	86	1000
5	3	15	18 - 75	PXB15-48WS05/NT	75	382	86	1000
5	3	15	36 - 75	PXB15-48S05/NT	75	372	88	1000
12	1.3	15.6	9 - 18	PXB15-12S12/NT	100	1605	85	330
12	1.3	15.6	9 - 36	PXB15-24WS12/NT	100	783	87	330
12	1.3	15.6	18 - 36	PXB15-24S12/NT	100	783	87	330
12	1.3	15.6	18 - 75	PXB15-48WS12/NT	100	392	87	330
12	1.3	15.6	36 - 75	PXB15-48S12/NT	100	387	88	330
15	1	15	9 - 18	PXB15-12S15/NT	100	1506	87	220
15	1	15	9 - 36	PXB15-24WS15/NT	100	753	87	220
15	1	15	18 - 36	PXB15-24S15/NT	100	744	88	220
15	1	15	18 - 75	PXB15-48WS15/NT	100	377	87	220
15	1	15	36 - 75	PXB15-48S15/NT	100	372	88	220
Dual Outputs								
±5	±1.5	15	9-18	PXB15-12D05/NT	100	1543	85	±500
±5	±1.5	15	9-36	PXB15-24WD05/NT	100	772	85	±500
±5	±1.5	15	18-36	PXB15-24D05/NT	100	772	85	±500
±5	±1.5	15	18-75	PXB15-48WD05/NT	100	386	85	±500
±5	±1.5	15	36-75	PXB15-48D05/NT	100	386	85	±500
±12	±0.625	15	9-18	PXB15-12D12/NT	100	1506	87	±150
±12	±0.625	15	9-36	PXB15-24WD12/NT	100	753	87	±150
±12	±0.625	15	18-36	PXB15-24D12/NT	100	744	88	±150
±12	±0.625	15	18-75	PXB15-48WD12/NT	100	382	86	±150
±12	±0.625	15	36-75	PXB15-48D12/NT	100	368	89	±150
±15	±0.500	15	9-18	PXB15-12D15/NT	100	1488	88	±100
±15	±0.500	15	9-36	PXB15-24WD15/NT	100	744	88	±100
±15	±0.500	15	18-36	PXB15-24D15/NT	100	744	88	±100
±15	±0.500	15	18-75	PXB15-48WD15/NT	100	377	87	±100
±15	±0.500	15	36-75	PXB15-48D15/NT	100	372	88	±100

Outline Drawing



- All dimensions in inches (mm)
Tolerance: X.XX±0.02 (X.X±0.5)
X.XXX±0.01 (X.XX±0.25)
- Pin pitch tolerance ±0.01 (0.25)
- Pin dimension tolerance ±0.004 (0.1)

Pinout

Pin #	Function
	Single Output Dual Output
1	+ Input + Input
2	- Input - Input
3	Remote On/Off Remote On/Off
4	+ Output + Output
5	Trim Common
6	- Output - Output

Options

N	Negative logic remote on/off
P	Positive logic remote on/off
T	Trim - remote adjust (single output models only)
Preferred	Example PXB15-24WS3P3/NT

Other Lambda Industrial Products

CC-E	1.5 - 25W, 5, 12, 24 & 48V DC-DC
PX	10 - 40W, 12, 24 & 48V DC-DC

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