

15W Single & Dual Output DC-DC Converters

Features

- ◆ Industry Standard 1" x 1" Footprint
- ◆ Through Hole
- ◆ Agency Approved
- ◆ Wide range input (PXB15-xxW)
- ◆ Six sided shielding



Key Market Segments & Applications



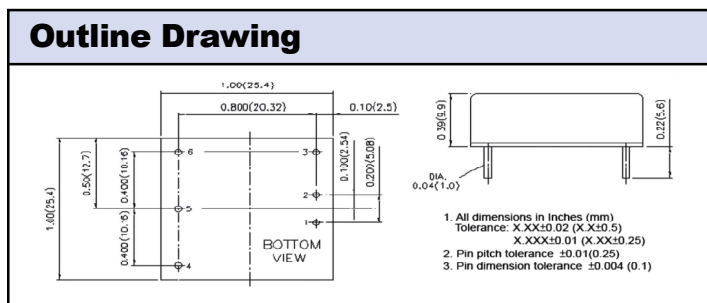
Specifications

Model		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 +85°C (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	-			See Installation Diagrams	
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)	in			1 x 1 x 0.39"	
Mounting	-			Through Hole	
Weight	g			15	
Warranty	yrs			Three 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/N	100	1543	85	±500
±5	±1.5	15	9-36	PXB15-24WD05/N	100	772	85	±500
±5	±1.5	15	18-36	PXB15-24D05/N	100	772	85	±500
±5	±1.5	15	18-75	PXB15-48WD05/N	100	386	85	±500
±5	±1.5	15	36-75	PXB15-48D05/N	100	386	85	±500
±12	±0.625	15	9-18	PXB15-12D12/N	100	1506	87	±150
±12	±0.625	15	9-36	PXB15-24WD12/N	100	753	87	±150
±12	±0.625	15	18-36	PXB15-24D12/N	100	744	88	±150
±12	±0.625	15	18-75	PXB15-48WD12/N	100	382	86	±150
±12	±0.625	15	36-75	PXB15-48D12/N	100	368	89	±150
±15	±0.500	15	9-18	PXB15-12D15/N	100	1488	88	±100
±15	±0.500	15	9-36	PXB15-24WD15/N	100	744	88	±100
±15	±0.500	15	18-36	PXB15-24D15/N	100	744	88	±100
±15	±0.500	15	18-75	PXB15-48WD15/N	100	377	87	±100
±15	±0.500	15	36-75	PXB15-48D15/N	100	372	88	±100



Heat Sink (0.22" high)

HAPXB	(includes thermal adhesive pad)
HAPXBDCCLIP	(two clips required when used)

Pinout

Pin #	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 Industrial Products

CC-E	1.5 - 30W, 5, 12, 24 & 48V DC-DC
PX	10 - 60W, 12, 24 & 48V DC-DC

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

