



- Industry Standard 2" x 1" Footprint
- Six Sided Shielding
- Safety Agency Certifications
- 9-36V or 18-75VDC Input

PXD20W Series

Single and Dual Output
20W DC-DC Converters

Key Market Segments & Applications

- Telecom
- Datacom
- Process Control

PXD20W Features and Benefits

Features

- Safety Certification
- Wide range input
- Six sided shielding

Benefits

- Easier system approvals
- Less parts to inventory
- Reduced radiated noise

Specifications	Single Output	Dual Output
ITEMS		
Max Output Power		20W
Voltage Accuracy		±1%
Voltage Adjustment	±10%	None
Minimum Load		None
Line Regulation	±0.2%	±0.5%
Load Regulation	±0.5%	±1%
Cross Regulation (25% to 100%)	-	±5%
Ripple and Noise	See table	
Start up time	20ms	
Remote on/off	Positive Logic: ON: Open or 3-12V, OFF Short or <1.2V Negative Logic: ON: Short or <1.2V, OFF: Open or 3-12V	
Temperature Coefficient	<±/-0.02%/°C	
Operating Temperature	-40°C to +66°C, derating necessary above 66°C	
Maximum Case Temperature	+105°C	
Storage Temperature	-55°C to +125°C	
Thermal Shock	MIL-STD-810F	
Relative Humidity (non condensing)	5 to 95%	
Transient Response (25% step load change)	250µs recovery	
Overvoltage Protection (Zener clamp)	3.3: 3.9V, 5V: 6.2V, 12V: 15V, 15V: 18V	
Overcurrent and Short Circuit Protection	Typically at 150%, hiccup with self recovery	
Input Surge Voltage (Maximum for 100ms)	24V input: 50V, 48V input: 100V	
Reflected input ripple (peak to peak)	20mA	
Isolation Voltage	1600VDC minimum	
Isolation Resistance	10 ⁹ Ω minimum	
Isolation Capacitance (max)	1500pF	
Typical Switching Frequency (Fixed)	400kHz	
MTBF (BELLCORE TR-NWT-000332)	1,620,000 hours	
Vibration	MIL-STD-810F	
Conducted and Radiated Emissions (1)	EN55022 Level A	
Immunity (2)	EN61000-4-2, -3, -4, -5, -6	
Safety Agency Certifications	IEC60950-1, UL60950-1, EN60950-1, CE Mark	
Size mm (L x W x H)	50.8 x 25.4 x 10.2	
Weight (g)	27	
Warranty (yrs)	2	

Model Selector							
Model	Output Volt (V)	Output Curr (A)	Output Power (W)	Input Volt (V)	Ripple & Noise (note 3)	Max Output Capacitance (note 4)	Eff.(%)
PXD20-24WS3P3	3.3V	5.5A	18W	9 - 36VDC	60mVp-p	18000 μ F	85%
PXD20-24WS05	5V	4.0A	20W	9 - 36VDC	75mVp-p	9600 μ F	88%
PXD20-24WS12	12V	1.67A	20W	9 - 36VDC	75mVp-p	1650 μ F	86%
PXD20-24WS15	15V	1.33A	20W	9 - 36VDC	75mVp-p	1050 μ F	86%
PXD20-24WD05	\pm 5V	\pm 2.0A	20W	9 - 36VDC	100mVp-p	\pm 4800 μ F	88%
PXD20-24WD12	\pm 12V	\pm 0.83A	20W	9 - 36VDC	100mVp-p	\pm 825 μ F	87%
PXD20-24WD15	\pm 15V	\pm 0.67A	20W	9 - 36VDC	100mVp-p	\pm 525 μ F	87%
PXD20-48WS3P3	3.3V	5.5A	18W	18 - 75VDC	60mVp-p	18000 μ F	85%
PXD20-48WS05	5V	4.0A	20W	18 - 75VDC	75mVp-p	9600 μ F	88%
PXD20-48WS12	12V	1.67A	20W	18 - 75VDC	75mVp-p	1650 μ F	87%
PXD20-48WS15	15V	1.33A	20W	18 - 75VDC	75mVp-p	1050 μ F	87%
PXD20-48WD05	\pm 5V	\pm 2.0A	20W	18 - 75VDC	100mVp-p	\pm 4800 μ F	89%
PXD20-48WD12	\pm 12V	\pm 0.83A	20W	18 - 75VDC	100mVp-p	\pm 825 μ F	88%
PXD20-48WD15	\pm 15V	\pm 0.67A	20W	18 - 75VDC	100mVp-p	\pm 525 μ F	88%

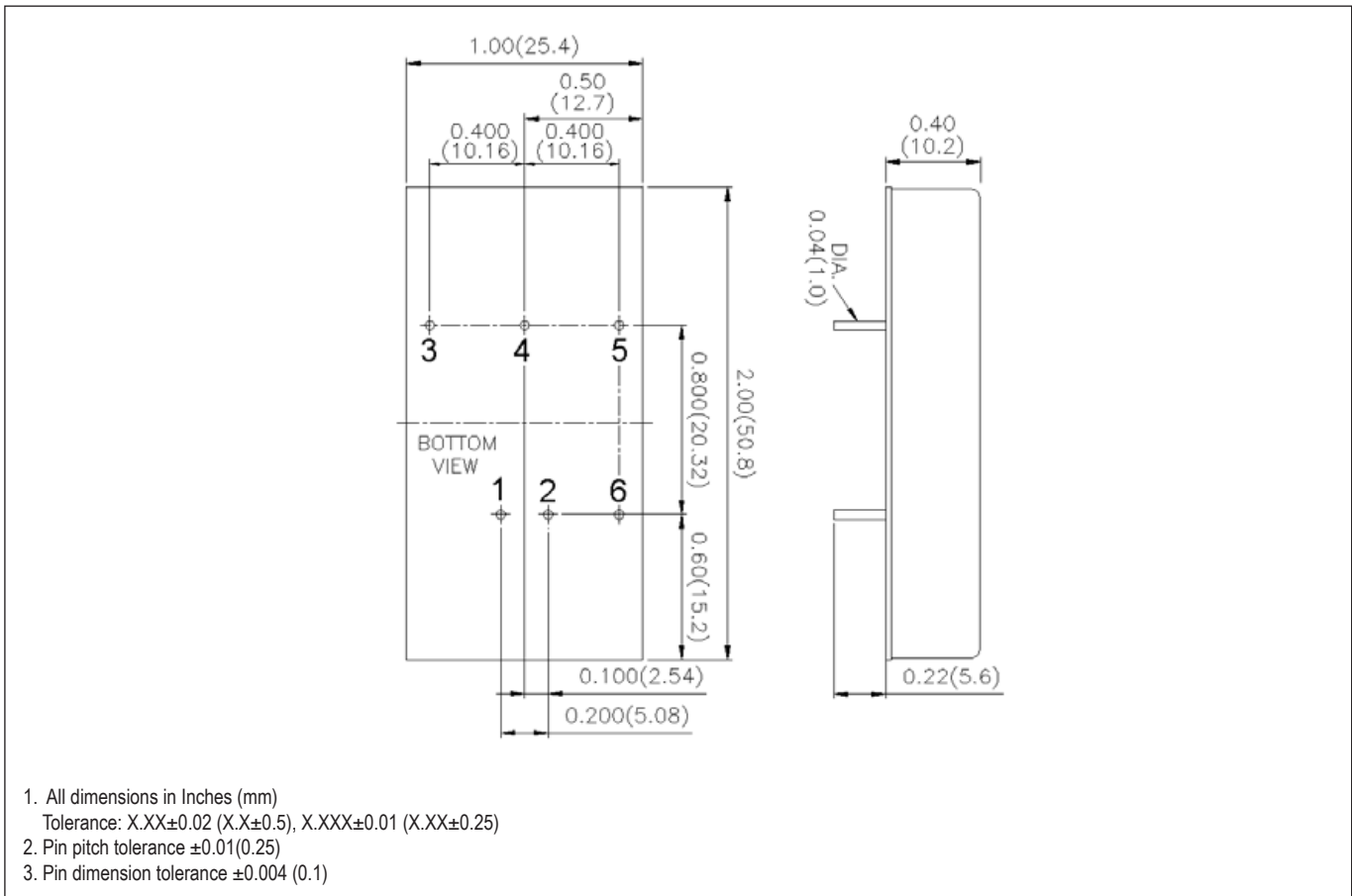
Specification Notes:

- (1) With external ceramic capacitor (24V: N/A, 48V: 1 μ F/100V) connected across input pins
- (2) For EN61000-4-4 & -5 compliance, fit external electrolytic capacitor 220 μ F/100V, ESR 48M Ω connected across input pins
- (3) Typical value @ nominal input/output
- (4) Value with minimum Vin and constant resistive load

Options	Single Output	Dual Output
Suffix	Function	Function
No Suffix	Positive Logic & Output Trim	Positive Logic (No trim function)
N	Negative Logic & Output Trim	Negative Logic (No trim function)

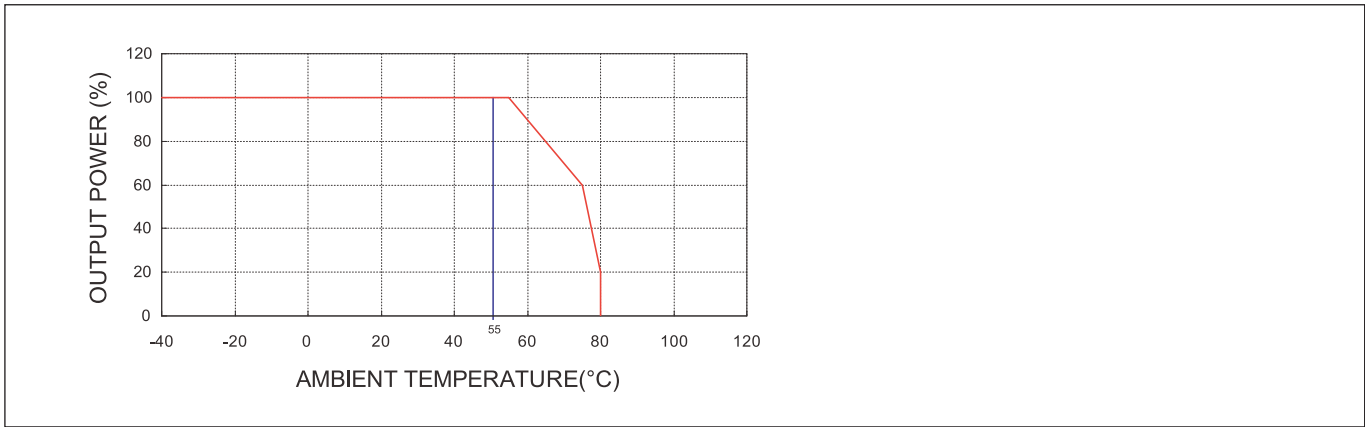
Add suffix for N option, Example PXD20-48WS12-N

Outline Drawing PXD20W Series



Pinout		
Pin#	Function	
	Single Output	Dual Output
1	+ Input	+ Input
2	- Input	- Input
3	+ Output	+ Output
4	Trim	Common
5	- Output	- Output
6	CTRL	CTRL

Derating Curve PXD20W Series





TDK-Lambda France SAS

ZAC des Delaches
 CS 41077
 9 rue Thuillere
 91978 Villebon Courtaboeuf
 France
 Tel: +33 1 60 12 71 65
 Fax: +33 1 60 12 71 66
france@fr.tdk-lambda.com
www.fr.tdk-lambda.com



Italy Sales Office

Via dei Lavoratori 128/130
 20092 Cinisello Balsamo (MI)
 Italy
 Tel: +39 02 61 29 38 63
 Fax: +39 02 61 29 09 00
info.italia@it.tdk-lambda.com
www.it.tdk-lambda.com



Netherlands

info@tdk-lambda.nl
www.tdk-lambda.nl



TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40
 77855 Achern
 Germany
 Tel: +49 7841 666 0
 Fax: +49 7841 5000
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



Austria Sales Office

Aredstrasse 22
 2544 Leobersdorf
 Austria
 Tel: +43 2256 655 84
 Fax: +43 2256 645 12
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



Scandinavia Sales Office

Valdemarsgade 7
 4100 Ringsted
 Denmark
 Tel: +45 24 63 95 65
 Fax: +45 69 80 44 99
info@de.tdk-lambda.com
www.emea.tdk-lambda.com



Switzerland Sales Office

Bahnhofstrasse 50
 8305 Dietlikon
 Switzerland
 Tel: +41 44 850 53 53
 Fax: +41 44 850 53 50
info@de.tdk-lambda.com
www.de.tdk-lambda.com



TDK-Lambda UK Ltd.

Kingsley Avenue
 Ilfracombe
 Devon EX34 8ES
 United Kingdom
 Tel: +44 (0) 12 71 85 66 66
 Fax: +44 (0) 12 71 86 48 94
powersolutions@uk.tdk-lambda.com
www.uk.tdk-lambda.com



TDK-Lambda Ltd.

Kibbutz
 Givat Hashlosha 48800
 Israel
 Tel: +9 723 902 4333
 Fax: +9 723 902 4777
info@tdk-lambda.co.il
www.tdk-lambda.co.il



Russia

Technical Support:
 St Petersburg
 Tel: +7 (812) 6580463
Sales:
 Moscow
info@tdk-lambda.ru
www.tdk-lambda.ru

Local Distribution

