Single and Dual Output 10 to 20W DC-DC Converters

Features

- ◆ Industry Standard 2" x 1" Footprint
- Six Sided Shielding
- Agency Approved
- ◆ 12V, 24V and 48V Inputs
- ◆ UL, CSA, EN, CE approvals
- ◆ Wide range input

Key Market Segments & Applications















Specifications				
Model	PXD10	PXD15	PXD20	
Max Output Power	10W	15W	20W	
Voltage Accuracy	±2%	±1%	±1%	
Voltage Adjustment (Single Output Only)	None	None	±10%	
Minimum Load, each output (1)	10%	10%	Single 0%; Dual 10%	
Line Regulation	±1%	±1%	±0.2%	
Load Regulation (10% to 100%)	Single Output: ±1%	Single Output: ±1%	±0.5%	
, , , , , , , , , , , , , , , , , , ,	Dual Output: ±2%	Dual Output: ±2%		
Cross Regulation (25% to 100%)	•	±5%		
Ripple and Noise	Single 50m\	/, Dual 75mV	Single 75mV, Dual 100mV	
Start up time	20	ms	10ms	
Remote on/off (3)	Positive Logic	c: ON: Open or 3.5-12V, OFF S	hort or <1.2V	
	Negative Logi	c: ON: Short or <1.2V, OFF: Op	en or 3.5-12V	
Temperature Coefficient		<±0.02%/°C		
Operating Temperature		See derating curves		
Maximum Case Temperature		100°C		
Storage Temperature		-55 to 105°C		
Thermal Shock		MIL-STD-810D		
Relative Humidity	5 to 95% (non condensing)			
Transient Response (25% step load chg.)	500us recovery	500us recovery	300us recovery	
Overvoltage Protection (Zener clamp)	1.5-3.3V: 3.9V, 5V: 6.2V, 12V: 15V, 15V: 18V			
Overcurrent & Short Circuit Protection			covery	
Input Surge Voltage (Max. for 100ms)		ut: 36V, 24V input: 50V, 48V inp	ut: 100V	
Reflected input ripple (peak to peak) (2)	30mA	20mA	20mA	
Isolation Voltage	1600VDC minimum			
Isolation Resistance	10 ⁹ Ohms minimum			
Isolation Capacitance (max)	300		1000pF	
Typical Switching Frequency (Fixed)	300kHz	Single: 500kHz Dual: 300kHz	500kHz	
MTBF (BELLCORE TR-NWT-000332)	1,976,000 hours	2,041,000 hours	1,791,000 hours	
Vibration	10 - 55Hz, 2G, 30 minutes each X, Y, Z axis			
Conducted and Radiated Emissions	EN55022 Level A			
Immunity	EN61000-4-2, -3, -4, -5, -6 Pref Criteria 2			
Safety Agency Approval	IEC60950-1, UL60950-1, EN60950-1, CE Mark (48V input only)			
Size (L x W x H)	2x1x0.4"			
Weight	0.95 oz (27g)			
Warranty		Two Year		

Notes:

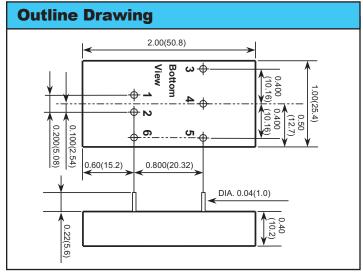
- (1) To meet regulation & noise specifications. Operation at zero load will not damage the device * See website for detailed specifications
- (2) 12uH source impedance in series with + input
- (3) Positive logic standard on 20W (see options table). Input current 2.5mA

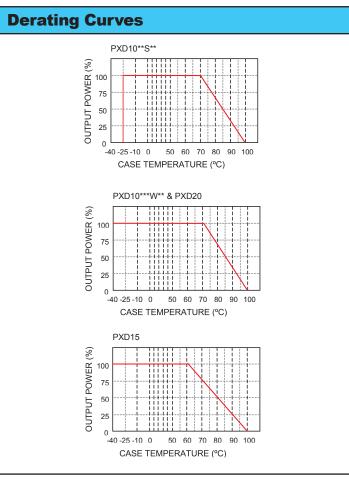
Mode	Selec	ctor			
Output Volt (V)	Output Curr (A)	Output Power (W)		Model	Eff.(%)
3.3	2.0	6.6	9 - 18VDC	PXD10-12S3P3	80
3.3	2.0	6.6	18 - 36VDC	PXD10-24S3P3	80
3.3	2.0	6.6	36 - 75VDC	PXD10-48S3P3	79
3.3	5.0	16.5	9 - 18VDC	PXD20-12S3P3	84
3.3	5.0	16.5	18 - 36VDC	PXD20-24S3P3	86
3.3	5.0	16.5	36 - 75VDC	PXD20-48S3P3	87
5	2.0	10	9 - 36VDC	PXD10-24WS05	80
5	2.0	10	18 - 75VDC	PXD10-48WS05	80
5	4.0	20	9 - 18VDC	PXD20-12S05	87
5	4.0	20	18 - 36VDC	PXD20-24S05	89
5	4.0	20	36 - 75VDC	PXD20-48S05	89
12	0.83	10	9 - 36VDC	PXD10-24WS12	82
12	0.83	10	18 - 75VDC	PXD10-48WS12	84
12	1.67	20	9 - 18VDC	PXD20-12S12	85
12	1.67	20	18 - 36VDC	PXD20-24S12	87
12	1.67	20	36 - 75VDC	PXD20-48S12	88
15	0.67	10	9 - 36VDC	PXD10-24WS15	80
15	0.67	10	18 - 75VDC	PXD10-48WS15	84
15	1.33	20	9 - 18VDC	PXD20-12S15	85
15	1.33	20	18 - 36VDC	PXD20-24S15	87
15	1.33	20	36 - 75VDC	PXD20-48S15	87
Dual Output	S				
±5	±1.5	15	9 - 18VDC	PXD15-12D05	83
±5	±1.5	15	18 - 36VDC	PXD15-24D05	84
±5	±1.5	15	36 - 75VDC	PXD15-48D05	85
±12	±0.416	10	9 - 36VDC	PXD10-24WD12	80
±12	±0.416	10	18 - 75VDC	PXD10-48WD12	78
±12	±0.833	20	9 - 18VDC	PXD20-12D12	86
±12	±0.833	20	18 - 36VDC	PXD20-24D12	87
±12	±0.833	20	36 - 75VDC	PXD20-48D12	88
±15	±0.333	10	9 - 36VDC	PXD10-24WD15	80
±15	±0.333	10	18 - 75VDC	PXD10-48WD15	81
±15	±0.667	20	9 - 18VDC	PXD20-12D15	86
±15	±0.667	20	18 - 36VDC	PXD20-24D15	87
±15	±0.667	20	36 - 75VDC	PXD20-48D15	87

Pinout				
	PXD10/	PXD15	РХ	(D20
PIN#	Single	Dual	Single	Dual
1			+Vin	
2			-Vin	
3		+	-Vout	
4	No Pin	Com	Trim	Com
5	-Vout			
6	Remote On/Off* Remote On/Off		e On/Off	
* optional, see table below. If not requested. Pin is not fitted.				

Remote On/Off Option		
Suffix	Function	
-P*	Positive Logic	(* Included in PXD20 models)
-N	Negative Logic	
Example: PX	(D1548S12-N	

Heat Sink	c (0.22" high)
HAPXD	(includes thermal adhesive pad)
HAPXBDCLIP	(two clips required when used)





Other Industrial Products		
CC-E	1.5-30W, 5 to 48VDC input	
PAQ,PAH,PAF	50-700W quarter, half & full bricks	

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TDK-Lambda:

PXD1012S3P3 PXD1024S3P3 PXD1024WD15 PXD1024WS05 PXD1024WS05P PXD1024WS12 PXD1048WD12
PXD1048WS15 PXD1512D05 PXD1512S12 PXD1512S15 PXD1524D12 PXD1524D15 PXD1524S05
PXD1524S12 PXD1548D05 PXD1548D12 PXD1548S3P3 PXD1548S3P3P PXD2012D12 PXD2012S15
PXD2012S3P3 PXD2024D12 PXD2024D15 PXD2024S05 PXD2024S15 PXD2024S1P8 PXD2024S3P3
PXD2048D12 PXD2048D15 PXD2048S05 PXD2048S12 PXD2048S15 PXD2048S3P3 PXD2012S12
PXD1048WD15 PXD1524D05 PXD2024S12 PXD1048WS05 PXD1048WS12 PXD2012D15 PXD2048S05N
PXD1048S3P3 PXD2012S05 PXD1548D15 PXD1024WS15 PXD2048S1P8 PXD1024WD12