- Industry Standard 2" x 2" Footprint
- Six Sided Shielding
- Agency Approved
- 12, 24 and 48V Inputs
- 4:1 Wide Range Input Models

Key Market Segments & Applications

Telecom
Datacom
Point of Load

PXF Series

Single, Dual, Triple Output 40W & 60W
DC-DC Converters

PXF Features and Benefits

Features	Benefits
• UL, CSA, EN, CE Approvals	• Easier System Approvals
• Wide Range Input	• Less Parts to Inventory
• Six Sided Shielding	• Reduced Radiated Noise

Specifications

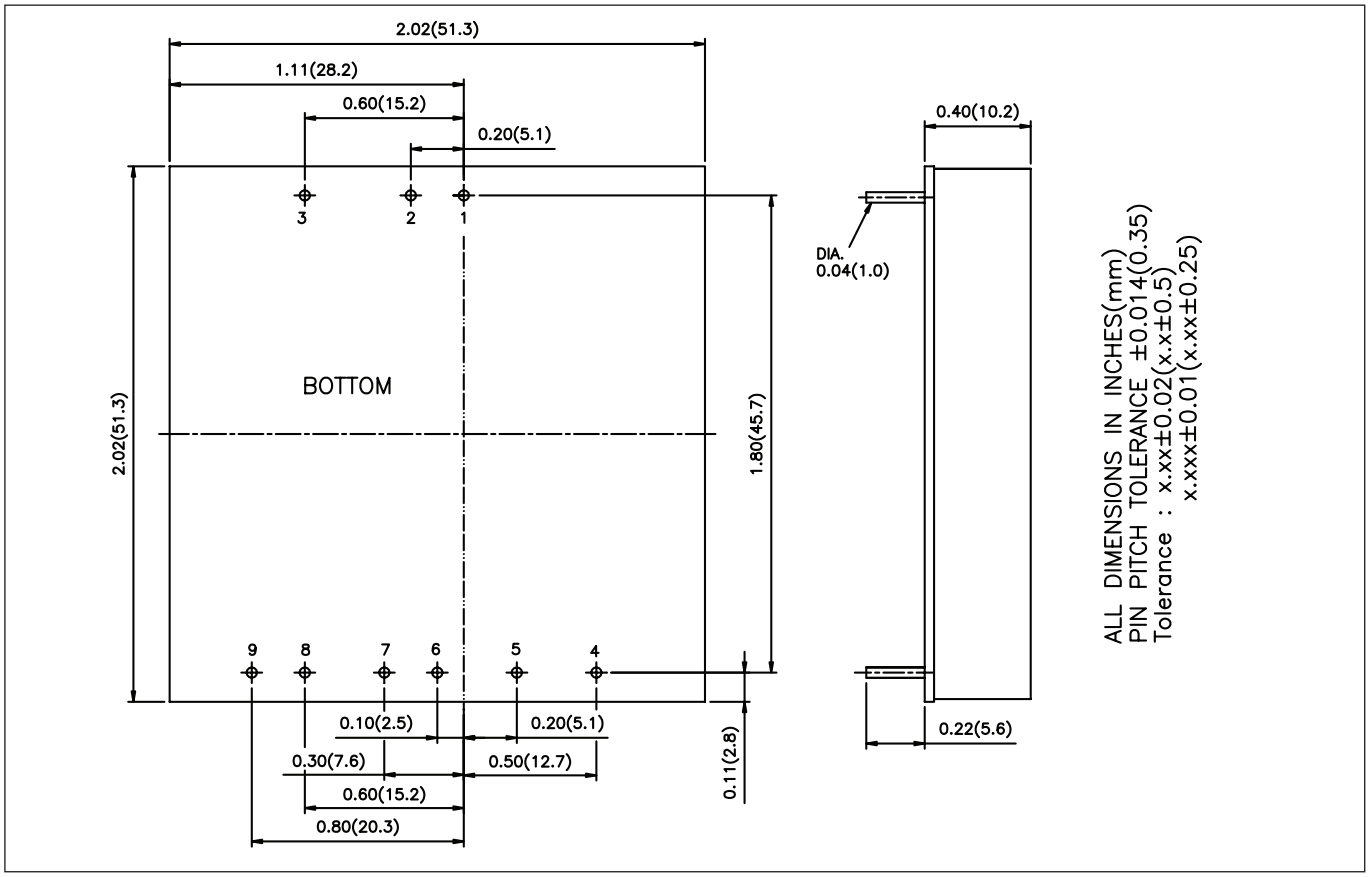
ITEMS		PXF
Maximum Output Power		40W or 60W
Voltage Accuracy (Full Load, Nom. Vin)		Single, Dual and Triple Main ±1%, Triple Auxiliaries ±5%
Voltage Adjustment	(1)	±10% (Single and Dual Output Only)
Minimum Load, each output	(2)	Single Output = 0%, Dual and Triple = 10% of full load rating
Line Regulation		Single / Dual ±0.5%, Triple (main) ±1%, Triple (auxiliary) ±5%
Load Regulation (10% to 100%)	(3)	Single ±0.5%, Dual ±1%, Triple (main) ±2%, Triple (auxiliary) ±5%
Cross Regulation (25% to 100%)	(4)	Triple (main) ±1%, Dual/Triple (auxiliary) ±5%
Start up time		PXF40: 25ms typ., PXF40xxW, PXF60: 20ms max.
Remote on/off (referenced to negative input)		Positive Logic: ON: Open or 3.0-12V, OFF Short or <1.2V
Temperature Coefficient		<±0.02%/°C
Operating Temperature		See derating curves
Maximum Case Temperature		PXF40: +100°C, PXF40-xxW +105°C, PXF60 +110°C
Storage Temperature		PXF40: -55°C to +105°C, PXF40xxW, PXF60 +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)		Typical 3.3V: 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)		12V input: 36V, 24V input: 50V, 48V input: 100V
Reflected input ripple (peak to peak)	(6)	PXF40: 40mA, PXF40xxW, PXF60: 20mA
Isolation Voltage		Input - Output, Input to Case: 1600VDC minimum
Isolation Resistance		10^9 Ω minimum
Isolation Capacitance (max)		PXF40, PXF60: 1000pF, PXF40xxW: 2500pF
Switching Frequency (Fixed)		300kHz (typ.)
MTBF (BELLCORE TR-NWT-000332)		PXF40: 1,398,000; PXF40xxW: 1,105,000, PXF60: 1.093,000 hours
Vibration		10 - 55Hz, 10G, 30 minutes each X, Y, Z axis
Conducted and Radiated Emissions		EN55022 Level A, see installation manual
Immunity		EN61000-4-2, -3, -4, -5, -6
Safety Agency Approval		IEC60950-1, UL60950-1, EN60950-1, CE Mark (48V input only)
Size mm (L x W x H)		50.8 x 50.8 x 10.1
Weight (g)		60
Warranty (yrs)		2

(1) Maximum output deviation is 10% inclusive of remote sense and trim. If remote sense is not being used, the +Sense and - Sense should be connected to their corresponding outputs; + output, - output.
(2) Dual and Triple output models require a minimum load of 10% on the output to maintain specified regulation. No load operation will not damage the device.
(3) Load regulation for triple output: Main output:10-100%, with 10-100% balanced load on auxiliaries. Auxiliary outputs: 10% to 100% balanced on all outputs.
(4) Cross regulation for dual output: asymmetrical load 25% / 100% full load. Cross regulation for triple output: Main output 100% load, auxiliary 100%, other auxiliary 25% to 100%. Auxiliary outputs: main output 100% load, auxiliary 100%, other auxiliary 25% to 100% or main output 25%, auxiliary 25%, other auxiliary 25% to 100%.
(5) An external filter capacitor is required for normal operation. The capacitor should be capable of handling a 1A ripple current for 48V and 24V models.
(6) Simulated Source impedence of 12μH placed in series with + input.

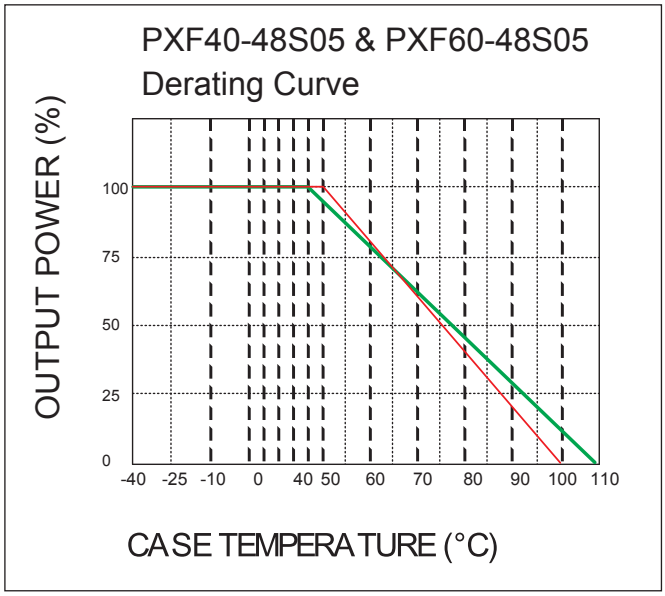
Model Selector

Output Volt(V)	Output Curr(A)	Input Volt(VDC)	Model	Ripple/Noise (mV)	Efficiency (%)	Max Load Cap(uF))
Single Outputs						
3.3	8	9 - 18	PXF40-12S3P3	50	84	21000
3.3	10	9 - 36	PXF40-24WS3P3	50	86	25750
3.3	8	18 - 36	PXF40-24S3P3	50	87	21000
3.3	10	18 - 75	PXF40-48WS3P3	50	86	25750
3.3	14	18 - 36	PXF60-24S3P3	75	89	36000
3.3	8	36 - 75	PXF40-48S3P3	50	88	21000
3.3	14	36 - 75	PXF60-48S3P3	75	89	36000
5	8	9 - 18	PXF40-12S05	50	86	13600
5	8	9 - 36	PXF40-24WS05	50	87	13600
5	8	18 - 36	PXF40-24S05	50	89	13600
5	8	18 - 75	PXF40-48WS05	50	88	13600
5	8	36 - 75	PXF40-48S05	50	90	13600
5	12	18 - 36	PXF60-24S05	75	90	20400
5	12	36 - 75	PXF60-48S05	75	90	20400
12	3.333	9 - 18	PXF40-12S12	75	86	2360
12	3.333	9 - 36	PXF40-24WS12	75	87	2360
12	3.333	18 - 36	PXF40-24S12	75	88	2360
12	3.333	18 - 75	PXF40-48WS12	75	87	2360
12	3.333	36 - 75	PXF40-48S12	75	89	2360
12	5	18 - 36	PXF60-24S12	100	90	3550
12	5	36 - 75	PXF60-48S12	100	90	3550
15	2.666	9 - 18	PXF40-12S15	75	87	1510
15	2.666	9 - 36	PXF40-24WS15	75	87	1510
15	2.666	18 - 36	PXF40-24S15	75	89	1510
15	2.666	18 - 75	PXF40-48WS15	75	87	1510
15	2.666	36 - 75	PXF40-48S15	75	89	1510
15	4	18 - 36	PXF60-24S15	100	90	2300
15	4	36 - 75	PXF60-48S15	100	90	2300
Dual Outputs						
±12	±1.667	9 - 36	PXF40-24WD12	120	86	±1200
±12	±1.8	9 - 18	PXF40-12D12	120	85	±1200
±12	±1.8	18 - 36	PXF40-24D12	120	87	±1200
±12	±1.667	18 - 75	PXF40-48WD12	120	86	±1200
±12	±1.8	36 - 75	PXF40-48D12	120	87	±1200
±15	±1.333	9 - 36	PXF40-24WD15	150	86	±750
±15	±1.4	9 - 18	PXF40-12D15	150	85	±750
±15	±1.4	18 - 36	PXF40-24D15	150	87	±750
±15	±1.333	18 - 75	PXF40-48WD15	150	86	±750
±15	±1.4	36 - 75	PXF40-48D15	150	87	±750
Triple Outputs						
3.3V,±12V	6.0,±0.4	9 - 18	PXF40-12T3312	50 / 75	83	13000,±330
3.3V,±12V	6.0,±0.4	18 - 36	PXF40-24T3312	50 / 75	85	13000,±330
3.3V,±12V	6.0,±0.4	36 - 75	PXF40-48T3312	50 / 75	86	13000,±330
5V,±12V	6.0,±0.4	9 - 18	PXF40-12T0512	50 / 75	85	6800, ±330
5V,±12V	6.0,±0.4	18 - 36	PXF40-24T0512	50 / 75	87	6800, ±330
5V,±12V	6.0,±0.4	36 - 75	PXF40-48T0512	50 / 75	88	6800, ±330
5V, ±15V	6.0, ±0.3	9 - 18	PXF40-12T0515	50/75	86	6800, ±110
5V, ±15V	6.0, ±0.3	18 - 36	PXF40-24T0515	50/75	87	6800, ±110
5V, ±15V	6.0, ±0.3	36 - 75	PXF40-48T0515	50/75	88	6800, ±110

Outline Drawing PXF Series



Derating Curve



Pinout

PIN#	Single O/P	Function Dual O/P	Triple O/P
1	+ Input	+ Input	+ Input
2	- Input	- Input	- Input
3	Remote on/off	Remote on/off	Remote on/off
4	No Pin	No Pin	+ Aux
5	- Sense (Note 1)	+ VO	Common
6	+ Sense (Note 1)	Common	-Aux
7	+ Output	Common	+ Output
8	- Output	- VO	- Output (Com)
9	Trim	Trim	N/C

Heat Sink (5.58mm high)

7G0026A	(includes thermal adhesive pad)

TDK-LAMBDA EMEA

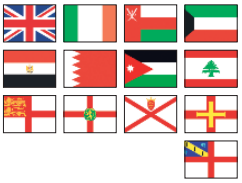
www.emea.tdk-lambda.com

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

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



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
Tel: +7 (499) 7557732
info@tdk-lambda.ru
www.tdk-lambda.ru

LOCAL DISTRIBUTION