

Enclosed or L Bracket
PCB Mount
Non Isolated

# DC-DC Selector

Nominal Input Voltage	# of Outputs	Output Power (W)								
		3	10	30	50	100	150	300	600	
5V	Single	CC-E								
		iAC, iBA								
5V	Dual	CC-E								
	12V	Single	CC-E							
iA, iBC										
PXD,PXE, PXF										
12V	Dual	CC-E								
		PXD,PXE, PXF								
12V	Triple			PXF						
	24V	Single	CC-E							
PXD,PXE, PXF										
PH-F										
PH-S										
iQ								PAH300		
PAF										
24V	Dual	CC-E								
		PXD,PXE, PXF								
		PAH75D*								
24V	Triple			PXF						
		48V	Single	CC-E						
PXD,PXE, PXF										
iSA, PAE*, iE, iP*										
iQ, PAQ*										
PH-F										
PH-S										
iH, PAH										
PAF										
48V	Dual			CC-E						
				PXD,PXE, PXF						
		PAQ*								
		PAH75D*								
48V	Triple			PXF						
	Multiple							Vega*		
82-185VDC	Single									
200-400VDC	Single									

\* See website



## Single, Dual, Triple Output 40W DC-DC Converters

- ◆ Industry Standard 2" x 2" Footprint
- ◆ Six Sided Shielding
- ◆ Agency Approved
- ◆ 12, 24V, and 48V Inputs (including 4:1 ranges)

**RoHS**

### Key Market Segments & Applications

Telecom, Datacom, Point of Load

### Features & Benefits

Feature	Benefit
◆ UL, CSA, EN, CE approvals	◆ Easier system approvals
◆ Wide range input	◆ Less parts to inventory
◆ Six sided shielding	◆ Reduced radiated noise

### Specifications

ITEMS	
Maximum Output Power	40W
Voltage Accuracy (Full Load, Nom. Vin)	Single, Dual and Triple Main $\pm 1\%$ , Triple Auxiliaries $\pm 5\%$
Voltage Adjustment (1)	$\pm 10\%$ (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 $\pm 0.5\%$ , Triple (main) $\pm 1\%$ , Triple (auxiliary) $\pm 5\%$
Load Regulation (10% to 100%) (3)	Single $\pm 0.5\%$ , Dual $\pm 1\%$ , Triple (main) $\pm 2\%$ , Triple (auxiliary) $\pm 5\%$
Cross Regulation (25% to 100%) (4)	Triple (main) $\pm 1\%$ , Dual/Triple (auxiliary) $\pm 5\%$
Start up time	PXF40: 25ms typ., PXF40xxW: 20ms max.
Remote on/off (referenced to negative input)	Positive Logic: ON: Open or 3.0-12V, OFF Short or $< 1.2V$
Temperature Coefficient	$< \pm 0.02\%/^{\circ}C$
Operating Temperature	See derating curves
Maximum Case Temperature	PXF40: 100 $^{\circ}C$ , PXF40-xxW 105 $^{\circ}C$ (Over temp 110 $^{\circ}C$ )
Storage Temperature	PXF40: -55 to 105 $^{\circ}C$ , PXF40xxW 125 $^{\circ}C$
Thermal Shock	MIL-STD-810F
Relative Humidity (non condensing)	5 to 95%
Transient Response (25% step load change)	250us recovery
Overvoltage Protection (Zener clamp)	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: 20mA
Isolation Voltage	Input - Output, Input to Case: 1600VDC minimum
Isolation Resistance	10 $^{\circ}$ Ohms minimum
Isolation Capacitance (max)	PXF40: 1000pF, PXF40xxW: 2500pF
Switching Frequency (Fixed)	300kHz (typ.)
MTBF (BELLCORE TR-NWT-000332)	PXF40: 1,398,000; PXF40xxW: 1,105,000 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 (L x W x H)	2 x 2 x 0.4"
Weight	2.11 oz (60g)
Warranty	Two Year

- (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 impedance of 12uH placed in series with + input.

