



Single and Dual Output 20W to 30W DC-DC Converters

- ◆ Industry Standard 2" x 1.6" Footprint
- ◆ Six Sided Shielding
- ◆ Agency Approved
- ◆ 12V, 24V and 48V Inputs

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	PXE20	PXE30
Max Output Power	20W	30W
Voltage Accuracy	±2%	±1%
Voltage Adjustment	±10%	
Minimum Load, each output (1)	10%	None
Line Regulation	±0.2% for single, ±0.5% for dual	
Load Regulation (25% to 100%)	Single ±0.5%, Dual ±3%	Single ±0.5%, Dual ±1%
Cross Regulation (25% to 100%)	Dual ±5%	
Ripple and Noise (P-P)	Single: 75mV; Dual: 100mV	
Start up time	20ms typ.	25ms typ.
Remote on/off (3)	Positive Logic: ON: Open or 3.5-12V, OFF Short or <1.2V	
Temperature Coefficient	<±0.02%/°C	
Operating Temperature	-40 to +100°C, see derating curve	
Maximum Case Temperature	100°C (Over temperature protection at 115°C - PXE30 model)	
Storage Temperature	-55 to 105°C	
Thermal Shock	MIL-STD-810D	
Relative Humidity (non condensing)	5 to 95%	
Transient Response (25% step load change)	500us recovery	300us 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) (2)	25mA	30mA
Isolation Voltage	1600VDC minimum (Input-Output, Input-Case)	
Isolation Resistance	10 ⁹ Ohms minimum	
Isolation Capacitance (max)	300pF	1000pF
Typical Switching Frequency (Fixed)	300kHz	
MTBF (BELLCORE TR-NWT-000332)	1,976,000 hours	1,535,000 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, UL60950, EN60950, CE Mark (48V input only)	
Size (L x W x H)	2 x 1.6 x 0.4"	
Weight	1.69 oz (48g)	
Warranty	One Year	

Notes:

- (1) To meet regulation & noise specifications. Operation at zero load will not damage the device
- (2) 12uH source impedance in series with + input
- (3) Max sink current 20mA (PXE20), 2.5mA (PXE30); The on/off pin is referenced to the negative input

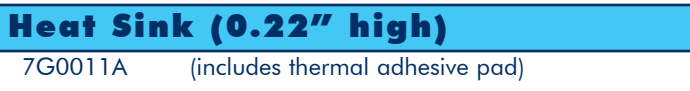


Outline Drawing

Technical drawing of a PCB layout showing dimensions in inches and millimeters. The drawing includes a "Bottom View" of a rectangular board with 8 pins. Dimensions are provided for the board size, pin locations, and a side feature. A list at the bottom states:

1. All dimensions in Inches (mm)
2. Pin pitch tolerance $-0.014(0.35)$

Derating Curve



Other Lambda Industrial Products

PS	1.5 - 10W, 5V, 12V, 24V & 48V input DC-DC converters
PAQ	} 50 - 700W quarter, half & full bricks
PAH	
PAF	

For Additional Information, please visit
www.lambdapower.com/products/px-series.htm