

Cool-Power[®] PI60-XX

Preliminary Datasheet for High Efficiency, High Current Inductor



Description

The PI60 is high performance Ferrite core inductor designed to maintain low losses at high AC flux and high switching frequency. This inductor is specifically designed for use with Picor Cool-Power ZVS Regulators.

Features

- High ripple current, >80Apeak
- High frequency, 2MHz
- Low DC resistance, $500\mu\Omega$ max.
- -55°C to 125°C operating range (T_J)

Applications

• For use with Picor Cool-Power regulators

Package Information

• 8.1x9.7x6.4mm flat package, surface mount

Electrical Characteristics at 25°C						
Part Number	Nominal Inductance at 1MHz/1Vrms ±10%	Peak Current, <3% Roll Off	DC Resistance Max			
	[nH]	[A]	[mΩ]			
PI60-02-FPIZ	80	90	0.5			
PI60-04-FPIZ	125	55	0.5			
PI60-05-FPIZ	150	40	0.5			

This is a preliminary datasheet. The information provided is from simulation, bench performance, test, and desired operation. All of the information within this datasheet is subject to change.



Order Information

Part Number	Nominal Inductance (nH) at 1MHz/1Vrms	Package	Transport Media	QTY
PI60-02-FPIZ	80	8.1x9.7x6.4mm flat package, surface mount	13" Tape&Reel	1,400
PI60-04-FPIZ	125	8.1x9.7x6.4mm flat package, surface mount	13" Tape&Reel	1,400
PI60-05-FPIZ	150	8.1x9.7x6.4mm flat package, surface mount	13" Tape&Reel	1,400

Thermal, Storage, and Handling Information

Storage Temperature	-65°C to 150°C
Operating Junction Temperature	-55°C to 125°C
Soldering reflow temperature	J-STD-020D compliant

Electrical Characteristics





Mechanical Package Drawings





RECOMMENDED PCB LAYOUT TOLLERANCES ARE ± 0.08mm









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