Commercial Inductors, High Temperature (155 °C) Series



FEATURES

- High temperature rating, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up the SRF (see Standard Electrical Specifications table)
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- **Patent pending**
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE GREEN (5-2008)

DESIGN SUPPORT TOOLS

click logo to get started

Design Tools Available

APPLICATIONS

- Notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- High current, high frequency multi-phase DC/DC Converters
- DC/DC converters in distributed power systems

STANDARD ELECTRICAL SPECIFICATIONS

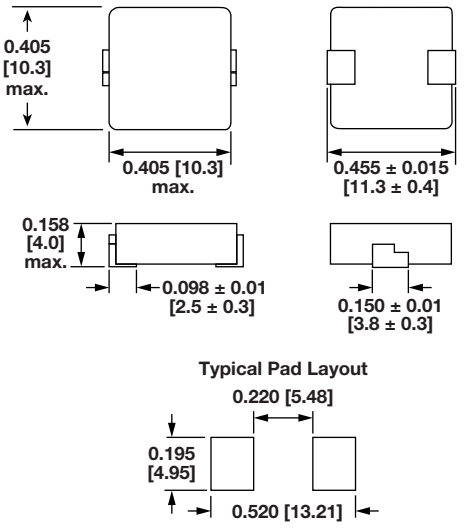
L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR ± 5 % AT 25 °C (mΩ)	HEAT RATING CURRENT DC (A) (1)	SATURATION CURRENT DC (A)		SRF TYP. (MHz)
		TYP.	TYP. (2)	TYP. (3)	
0.130	0.520	72	63	92	151

Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application

(1) DC current (A) that will cause an approximate ΔT of 40 °C
(2) DC current (A) that will cause L_0 to drop approximately 20 %
(3) DC current (A) that will cause L_0 to drop approximately 30 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

IHSR-4040DZ-51	0.13 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

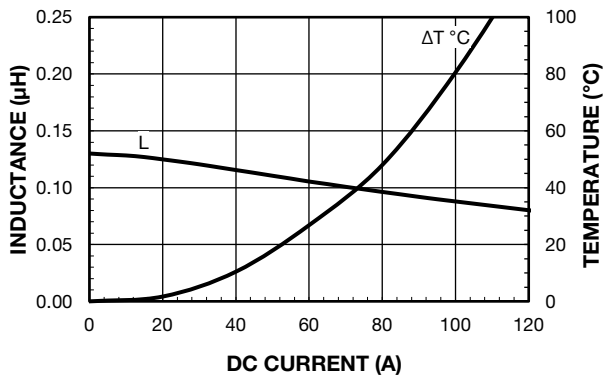
GLOBAL PART NUMBER

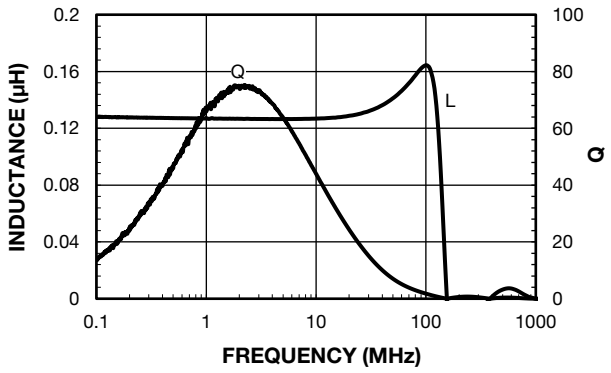
I	H	S	R	4	0	4	0	D	Z	E	R	R	1	3	M	5	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

For technical questions, contact: magnetics@vishay.com

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PERFORMANCE GRAPHS





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