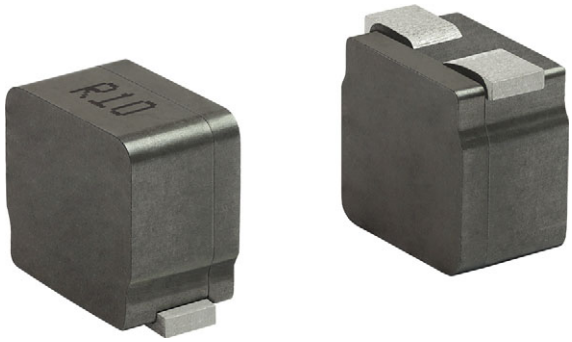
Ultra Low DCR Inductors, High Current, Vertical Mount Series



FEATURES

- High temperature rating, up to 155 °C
- Unique vertical mounting profile to optimize board space and utilize air flow for cooling
- Magnetically shielded metal alloy construction
- Optimized for high currents loads in high frequency converters
- Patented coil design achieves ultra low DCR and robust design
- Thermally conductive structure minimizes hot spots for enhanced heat dissipation over ferrite technologies in natural convection and active cooling environments
- Handles high transient current spikes without saturation
- IHVR design; PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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

LINKS TO ADDITIONAL RESOURCES

Product Page

APPLICATIONS

- Servers, data centers
- High current load EMI filters (12 V / 100 A or 48 V / 100 A)
- GaN converters
- Energy storage inductor for high frequency, low voltage converters (12 V to 1 V)

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR AT 25 °C (mΩ)		HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
		TYP.	MAX.		(2)	(3)	
IHVR4025JZEZR10M3Z	0.10	0.130	0.143	112	140	183	212
IHVR4025JZEZR15M3Z	0.15	0.130	0.143	112	82	112	126

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, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application

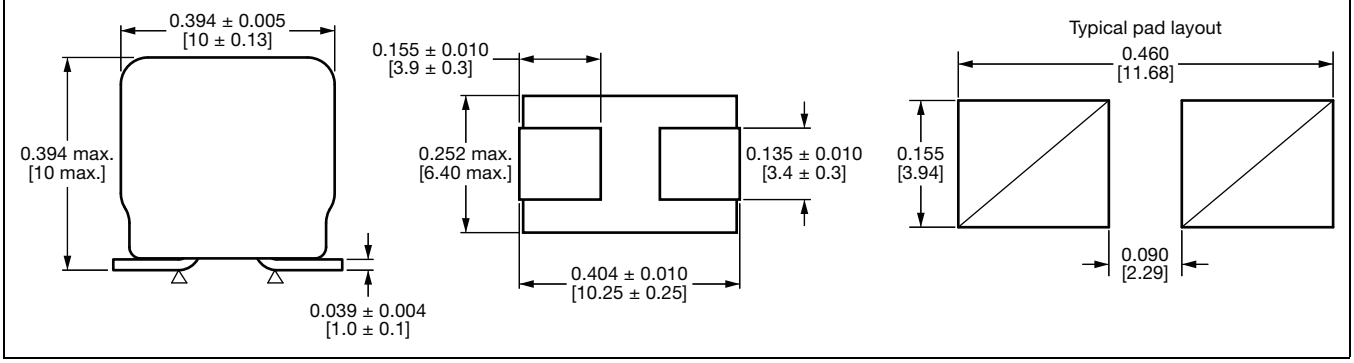
(1) DC current (A) that will cause an approximate ΔT of 40 °C
(2) DC current (A) that will cause L_0 to drop approximately 20 %
(3) DC current (A) that will cause L_0 to drop approximately 30 %

PATENT(S): www.vishay.com/patents
This Vishay product is protected by one or more United States and international patents.

For technical questions, contact: magnetics@vishay.com

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DIMENSIONS in inches [millimeters]



Note

- DCR measured at locations indicated by "Δ" on drawing

DESCRIPTION

IHVR-4025JZ-3Z	**0.10 µH**	**± 20 %**	**EZ**	**e3**
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

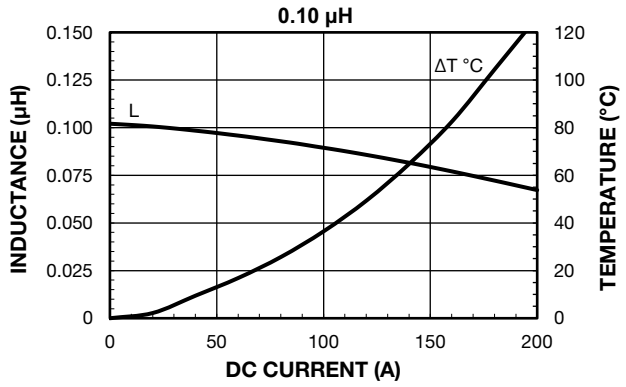
GLOBAL PART NUMBER

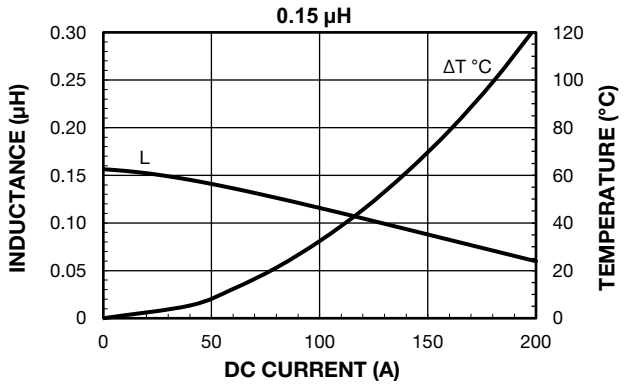
I H V R	4 0 2 5 J Z	E Z	R 1 0	M	3 Z
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOLERANCE	SERIES
			R10 = 0.10 µH	**M** = 20 %	

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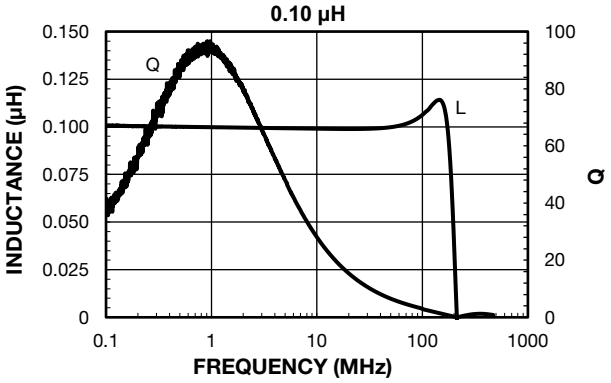
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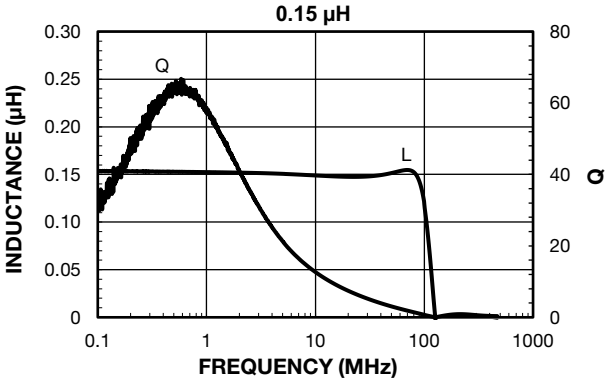
PERFORMANCE GRAPHS





PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY





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