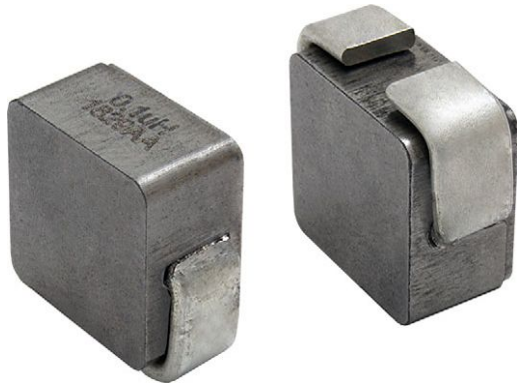


# Ultra Low DCR Inductors, High Current, Vertical Mount Series



## FEATURES

- High temperature rating, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 5 MHz. Filter inductor applications up to 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](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

## STANDARD ELECTRICAL SPECIFICATIONS

L <sub>0</sub> INDUCTANCE AT 100 kHz, 0.1 V, 0 A (μH)	DCR ± 7 % 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A)		SRF TYP. (MHz)
			(2)	(3)	
0.12	0.24	90	91	130	112

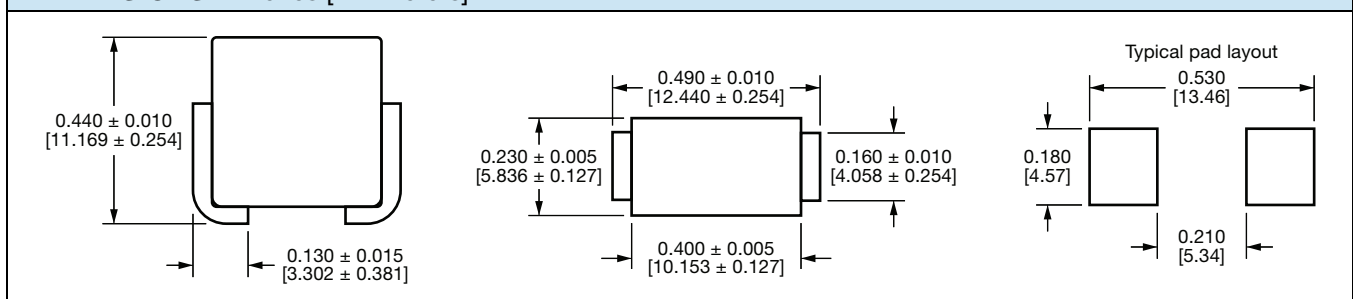
### Notes

- All test data is referenced to 25 °C ambient
  - Operating temperature range -40 °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<sub>0</sub> to drop approximately 20 %  
 (3) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %

## APPLICATIONS

- Desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)

## DIMENSIONS in inches [millimeters]



## DESCRIPTION

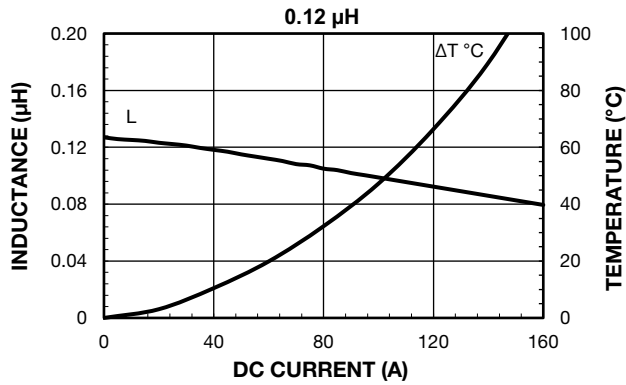
<b>IHVR-4024KE-51</b>	<b>0.12 μH</b>	<b>± 20 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

## GLOBAL PART NUMBER

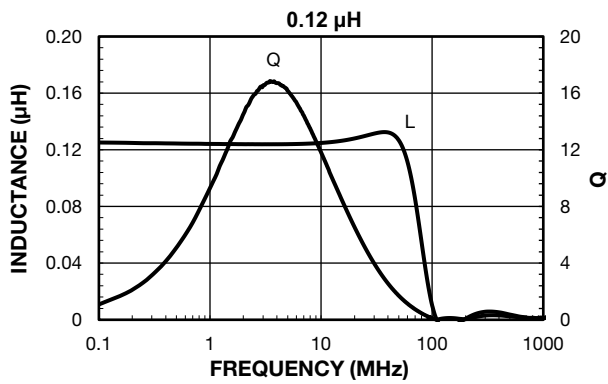
I	H	V	R	4	0	2	4	K	E	E	R	R	1	2	M	5	1
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE		TOL.	SERIES				



**PERFORMANCE GRAPHS**



**PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY**





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