

# Inductors, Epoxy Conformal Coated, Axial Leaded



## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 0.1  $\mu$ H to 1000  $\mu$ H

**Inductance Tolerance:**  $\pm 10\%$  from 0.1  $\mu$ H to 1000  $\mu$ H standard,  $\pm 5\%$  optional

**Operating Temperature Range:** -20 °C to +105 °C

**Dielectric Strength:** 250 V<sub>RMS</sub>

## MECHANICAL SPECIFICATIONS

**Terminal Strength:** Pull = 5 pounds, twist = 360 °C x 3

**Protection:** Epoxy uniform roll coated

**Leads:** Tinned copper

## ENVIRONMENTAL SPECIFICATIONS

**Maximum Temperature Rise:** +20 °C

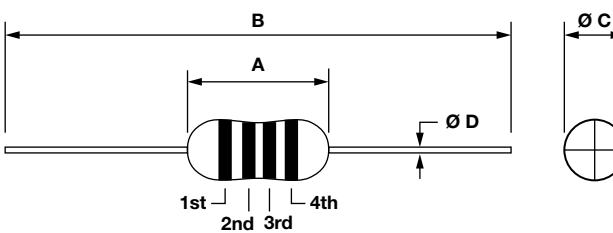
## FEATURES

- High performance ferrite core is used in this epoxy conformally coated choke which allows for inductance values to 1000  $\mu$ H
- Axial lead type, small lightweight design
- Special magnetic core structure contributes to high Q and self-resonant frequencies
- Treated with epoxy resin coating for humidity resistance to ensure long life
- Heat resistant adhesives
- Material categorization: For definitions of compliance please see [www.vishay.com/doc299912](http://www.vishay.com/doc299912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

## DIMENSIONS in inches [millimeters]

				
MODEL	A (MAX.)	B	C (MAX.)	D
IRF-24	0.276 [7.0]	2.480 $\pm$ 0.039 [63.0 $\pm$ 1.0]	0.118 [3.0]	0.020 $\pm$ 0.002 [0.50 $\pm$ 0.05]

## STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. ( $\mu$ H)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)
IRF-24	0.10	$\pm 20$	30	25.2	280	0.085	1400
IRF-24	0.12	$\pm 20$	30	25.2	280	0.085	1350
IRF-24	0.15	$\pm 20$	30	25.2	280	0.095	1270
IRF-24	0.18	$\pm 20$	30	25.2	280	0.12	1200
IRF-24	0.22	$\pm 20$	40	25.2	280	0.15	1150
IRF-24	0.27	$\pm 20$	40	25.2	260	0.15	1110
IRF-24	0.33	$\pm 20$	40	25.2	260	0.15	1110
IRF-24	0.39	$\pm 20$	40	25.2	220	0.17	1000
IRF-24	0.47	$\pm 20$	40	25.2	200	0.17	1000
IRF-24	0.56	$\pm 20$	40	25.2	180	0.17	950
IRF-24	0.68	$\pm 20$	40	25.2	160	0.18	900
IRF-24	0.82	$\pm 20$	40	25.2	140	0.18	900
IRF-24	1.0	$\pm 5, \pm 10$	40	25.2	135	0.18	815
IRF-24	1.2	$\pm 5, \pm 10$	40	7.96	135	0.18	740
IRF-24	1.5	$\pm 5, \pm 10$	40	7.96	130	0.20	700
IRF-24	1.8	$\pm 5, \pm 10$	40	7.96	125	0.23	655
IRF-24	2.2	$\pm 5, \pm 10$	40	7.96	80	0.25	630
IRF-24	2.7	$\pm 5, \pm 10$	40	7.96	80	0.28	595
IRF-24	3.3	$\pm 5, \pm 10$	40	7.96	70	0.30	575
IRF-24	3.9	$\pm 5, \pm 10$	40	7.96	65	0.32	555
IRF-24	4.7	$\pm 5, \pm 10$	40	7.96	45	0.35	530
IRF-24	5.6	$\pm 5, \pm 10$	40	7.96	40	0.40	500
IRF-24	6.8	$\pm 5, \pm 10$	40	7.96	30	0.45	470
IRF-24	8.2	$\pm 5, \pm 10$	40	7.96	28	0.56	425

**STANDARD ELECTRICAL SPECIFICATIONS**

MODEL	IND. ( $\mu$ H)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)
IRF-24	10	$\pm 5, \pm 10$	40	7.96	22	0.72	370
IRF-24	12	$\pm 5, \pm 10$	40	2.52	20	0.80	350
IRF-24	15	$\pm 5, \pm 10$	40	2.52	16	0.88	335
IRF-24	18	$\pm 5, \pm 10$	40	2.52	15	1.0	315
IRF-24	22	$\pm 5, \pm 10$	40	2.52	13	1.2	285
IRF-24	27	$\pm 5, \pm 10$	40	2.52	11	1.35	270
IRF-24	33	$\pm 5, \pm 10$	40	2.52	10	1.5	255
IRF-24	39	$\pm 5, \pm 10$	40	2.52	9.5	1.7	240
IRF-24	47	$\pm 5, \pm 10$	50	2.52	8.5	2.3	205
IRF-24	56	$\pm 5, \pm 10$	50	2.52	7.5	2.6	195
IRF-24	68	$\pm 5, \pm 10$	50	2.52	6.5	2.9	185
IRF-24	82	$\pm 5, \pm 10$	50	2.52	6.0	3.2	175
IRF-24	100	$\pm 5, \pm 10$	50	2.52	5.5	3.7	165
IRF-24	120	$\pm 5, \pm 10$	60	0.796	5.4	3.8	160
IRF-24	150	$\pm 5, \pm 10$	60	0.796	4.75	4.9	150
IRF-24	180	$\pm 5, \pm 10$	60	0.796	4.35	5.5	140
IRF-24	220	$\pm 5, \pm 10$	60	0.796	4.0	6.5	130
IRF-24	270	$\pm 5, \pm 10$	60	0.796	3.7	7.5	120
IRF-24	330	$\pm 5, \pm 10$	60	0.796	3.4	9.5	100
IRF-24	390	$\pm 5, \pm 10$	60	0.796	2.8	10.5	95
IRF-24	470	$\pm 5, \pm 10$	60	0.796	2.56	17.5	90
IRF-24	560	$\pm 5, \pm 10$	60	0.796	2.35	19.5	85
IRF-24	680	$\pm 5, \pm 10$	60	0.796	2.0	20.0	75
IRF-24	820	$\pm 5, \pm 10$	60	0.796	1.60	23.7	65
IRF-24	1000	$\pm 5, \pm 10$	50	0.796	1.15	30.0	60

**ORDERING INFORMATION**

<b>IRF-24</b>	<b>6.8 <math>\mu</math>H</b>	<b><math>\pm 10 \%</math></b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

**GLOBAL PART NUMBER**

<div>I</div> <div>R</div> <div>F</div> <div>2</div> <div>4</div>	<div>E</div> <div>R</div>	<div>6</div> <div>R</div> <div>8</div>	<div>K</div>
MODEL	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE



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