Inductors, Epoxy Conformal Coated, Axial Leaded



FEATURES

- High performance ferrite core is used in this epoxy conformally coated choke which allows for inductance values to 1000 µH
- 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/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 0.1 µH to 1000 µH

Inductance Tolerance: ± 10 % from 0.1 µH to 1000 µH standard, ± 5 % optional

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

Dielectric Strength: 250 V_{RMS}

MECHANICAL SPECIFICATIONS

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

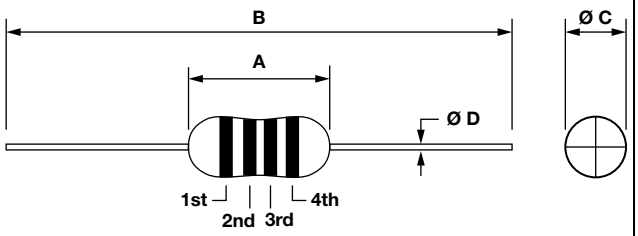
Protection: Epoxy uniform roll coated

Leads: Tinned copper

ENVIRONMENTAL SPECIFICATIONS

Maximum Temperature Rise: + 20 °C

DIMENSIONS in inches [millimeters]



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

STANDARD ELECTRICAL SPECIFICATIONS

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

For technical questions, contact: magnetics@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

STANDARD ELECTRICAL SPECIFICATIONS

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

ORDERING INFORMATION

IRF-24	**6.8 µH**	**± 10 %**	**ER**	**e3**
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	R	F	2	4	E	R	6	R	8	K
MODEL					PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE

For technical questions, contact: magnetics@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2024 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED