

Molded Inductors, Axial Leads, High Frequency and Noise Suppression Applications



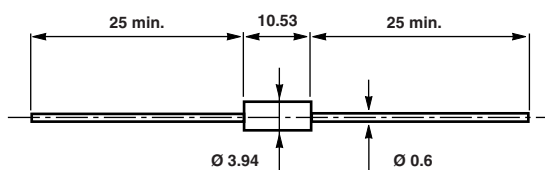
FEATURES

- Accurate dimensions
- Superior moisture protection
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

The inductors have copper winding on magnetic core structure.

DIMENSIONS in millimeters (± 0.5)



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	INDUCTANCE RANGE µH	RATED POWER $P_{70^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE V_{RMS}	TOLERANCE ⁽¹⁾ ± %	Q RANGE	I RANGE mA
TR022	0.1 to 1000	0.180	500	10	35 to 60	94 to 2600

Note

⁽¹⁾ ± 10 % for 0.1 µH < L ≤ 1000 µH . On request: ± 5 % and ± 2 % for 1 µH < L ≤ 1000 µH

MECHANICAL SPECIFICATIONS

Coating	Molded epoxy
Weight	0.78 g

PACKAGING

Standard: In tape and reel of 1000 pieces, code R15 (R)
On request: 250 pieces tape in box "ammopack", code A15 (B)

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	+ 70 °C
Temperature limits	55 °C + 125 °C

MARKING

Standard:
Print marked-manufacturer, inductance value, tolerance

ORDERING INFORMATION (part number)

T	R	0	2	2	R	3	9	K	A	1	5						
MODEL		STYLE		VALUE		TOLERANCE		PACKAGING		SPECIAL							
TR		022		From 0.1 µH to 1000 µH R39 = 0.39 µH		K: ± 10 % On request: G: ± 2 % J: ± 5 %		R15 = Reel 1000 pieces On request: A15 = Ammopack 250 pieces		Special code given by Vishay							

PART NUMBER DESCRIPTION (for information only)

TR	022	µH39	10 %	B		e1
MODEL	STYLE	VALUE	TOLERANCE	PACKAGING	SPECIAL	LEAD (Pb)-FREE



STANDARD VALUES						
INDUCTANCE VALUE μH	TOLERANCE %	Q MIN.	TEST FREQUENCY MHz	RESISTANCE MAX. Ω	SRF MIN. MHz	I MAX. mA
0.10	± 10	35	25	0.027	550	2600
0.12	± 10	35	25	0.029	530	2490
0.15	± 10	35	25	0.030	525	2450
0.18	± 10	35	25	0.042	500	2070
0.22	± 10	35	25	0.050	450	1900
0.27	± 10	35	25	0.075	410	1550
0.33	± 10	35	25	0.090	370	1400
0.39	± 10	35	25	0.10	310	1330
0.47	± 10	35	25	0.12	260	1225
0.56	± 10	35	25	0.14	250	1130
0.68	± 10	35	25	0.15	240	1100
0.82	± 10	35	25	0.22	220	900
1	± 10	35	25	0.24	200	860
1.2	± 10	35	7.9	0.20	170	950
1.5	± 10	35	7.9	0.21	150	925
1.8	± 10	35	7.9	0.23	135	885
2.2	± 10	35	7.9	0.24	125	865
2.7	± 10	35	7.9	0.21	110	925
3.3	± 10	35	7.9	0.25	105	850
3.9	± 10	35	7.9	0.27	95	815
4.7	± 10	35	7.9	0.29	90	790
5.6	± 10	35	7.9	0.32	60	750
6.8	± 10	35	7.9	0.47	55	630
8.2	± 10	35	7.9	0.57	50	560
10	± 10	40	7.9	0.90	45	445
12	± 10	50	2.5	1.10	40	400
15	± 10	50	2.5	1.30	38	370
18	± 10	55	2.5	2	34	300
22	± 10	60	2.5	2.2	30	275
27	± 10	60	2.5	2.6	25	260
33	± 10	60	2.5	2.65	22	255
39	± 10	60	2.5	2.70	18	250
47	± 10	60	2.5	2.90	15	245
56	± 10	60	2.5	3.10	14	240
68	± 10	55	2.5	3.40	12	230
82	± 10	55	2.5	3.90	11	215
100	± 10	55	2.5	4.50	10	200
120	± 10	55	0.79	5.20	9	185
150	± 10	55	0.79	5.80	8	175
180	± 10	55	0.79	6.50	7	165
220	± 10	55	0.79	7.20	6	158
240	± 10	55	0.79	7.40	6	155
270	± 10	55	0.79	8	5.7	150
330	± 10	55	0.79	9	5.5	140
390	± 10	55	0.79	10	5.3	135
470	± 10	55	0.79	15	5	110
560	± 10	55	0.79	15.5	4	108
680	± 10	55	0.79	16.5	3.8	104
820	± 10	55	0.79	18	3.6	100
1000	± 10	55	0.79	20	3.2	94



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.

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.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.