

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



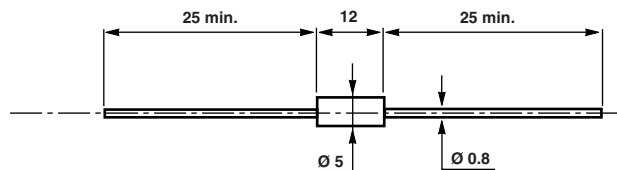
## FEATURES

- Accurate dimensions
- Superior moisture protection
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS  
COMPLIANT**

These inductors have copper winding on magnetic core structure.

## DIMENSIONS in millimeters ( $\pm 0.5$ )



## STANDARD ELECTRICAL SPECIFICATIONS

MODEL	INDUCTANCE RANGE $\mu\text{H}$	RATED POWER $P_{70^\circ\text{C}}$ W	LIMITING ELEMENT VOLTAGE $V_{\text{RMS}}$	TOLERANCE <sup>(1)</sup> $\pm \%$	Q RANGE	I RANGE mA
TR023	0.15 to 1000	0.300	500	10	20 to 50	120 to 3160

### Note

<sup>(1)</sup>  $\pm 10 \%$  for  $0.15 \mu\text{H} < L \leq 1000 \mu\text{H}$ . On request:  $\pm 5 \%$  and  $\pm 2 \%$  for  $1 \mu\text{H} < L \leq 1000 \mu\text{H}$

## MECHANICAL SPECIFICATIONS

Coating	Molded epoxy
Weight	1.3 g

## PACKAGING

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

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	$0^\circ\text{C}$ to $+70^\circ\text{C}$
Temperature limits	$-55^\circ\text{C}$ to $+125^\circ\text{C}$

## MARKING

Standard:  
print marked-manufacturer, inductance value, tolerance

## ORDERING INFORMATION (part number)

T	R	0	2	3	1	0	0	K	A	1	5						
MODEL TR		STYLE 023			VALUE From 0.15 $\mu\text{H}$ to 1000 $\mu\text{H}$ 100 = 10 $\mu\text{H}$			TOLERANCE K: $\pm 10 \%$ On request: G: $\pm 2 \%$ J: $\pm 5 \%$		PACKAGING R15 = reel 1000 pieces On request: A15 = ammopack 250 pieces			SPECIAL Special code given by Vishay				

## PART NUMBER DESCRIPTION (for information only)

TR	023	10 $\mu\text{H}$	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
0.15	± 10	40	25	0.030	500	3160
0.18	± 10	40	25	0.032	410	3060
0.22	± 10	40	25	0.035	400	2920
0.27	± 10	40	25	0.050	380	2440
0.33	± 10	40	25	0.065	340	2150
0.39	± 10	40	25	0.075	320	2000
0.47	± 10	40	25	0.085	300	1870
0.56	± 10	40	25	0.14	250	1470
0.68	± 10	40	25	0.15	230	1415
0.82	± 10	35	25	0.22	220	1165
1	± 10	35	25	0.30	190	1000
1.2	± 10	20	7.9	0.40	180	870
1.5	± 10	20	7.9	0.42	170	850
1.8	± 10	20	7.9	0.65	150	680
2.2	± 10	20	7.9	0.79	135	620
2.7	± 10	20	7.9	1.20	120	500
3.3	± 10	25	7.9	0.14	75	1465
3.9	± 10	25	7.9	0.15	55	1415
4.7	± 10	25	7.9	0.21	50	1200
5.6	± 10	25	7.9	0.28	50	1035
6.8	± 10	25	7.9	0.37	50	900
8.2	± 10	25	7.9	0.44	45	825
10	± 10	25	7.9	0.60	33	700
12	± 10	40	2.5	1	33	545
15	± 10	35	2.5	1.30	30	480
18	± 10	50	2.5	1.10	35	510
22	± 10	50	2.5	1.20	30	500
27	± 10	50	2.5	1.30	22	480
33	± 10	50	2.5	1.50	20	430
39	± 10	50	2.5	1.70	18	420
47	± 10	50	2.5	2.10	17	375
56	± 10	50	2.5	2.35	14	355
68	± 10	50	2.5	2.80	12	325
82	± 10	50	2.5	3.30	11	300
100	± 10	50	2.5	3.60	10	285
120	± 10	50	0.79	5	6.5	245
150	± 10	50	0.79	6.1	5.5	220
180	± 10	50	0.79	7.5	5.5	200
220	± 10	50	0.79	8.4	5.5	185
270	± 10	50	0.79	9	5	180
330	± 10	50	0.79	10	4.5	170
390	± 10	50	0.79	11	4.3	165
470	± 10	50	0.79	12	4	155
560	± 10	50	0.79	13	3.5	150
680	± 10	50	0.79	14	3.3	145
820	± 10	50	0.79	16	3	135
1000	± 10	50	0.79	17	2.6	120



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