

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



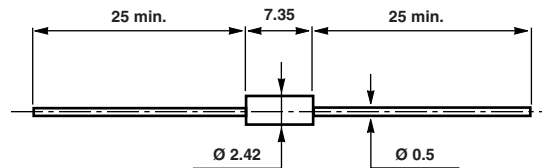
### FEATURES

- 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

The 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
TR021	0.022 to 1500	0.180	500	10	15 to 40	45 to 2530

**Note**

<sup>(1)</sup>  $\pm 10 \%$  for  $0.022 \mu\text{H} < L \leq 1500 \mu\text{H}$ . On request:  $\pm 5 \%$  and  $\pm 2 \%$  for  $1 \mu\text{H} < L \leq 1000 \mu\text{H}$

### MECHANICAL SPECIFICATIONS

Coating	Molded epoxy
Weight	0.5 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	$0^\circ\text{C}$ 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	1	6	R	8	K	R	1	5						
MODEL <b>TR</b>		STYLE <b>021</b>				VALUE From 0.022 $\mu\text{H}$ to 1500 $\mu\text{H}$ <b>6R8</b> = 6.8 $\mu\text{H}$			TOLERANCE <b>K</b> : $\pm 10 \%$ On request: <b>G</b> : $\pm 2 \%$ <b>J</b> : $\pm 5 \%$		PACKAGING <b>R15</b> = reel 1000 pieces On request: <b>A15</b> = ammopack 250 pieces			SPECIAL Special code given by Vishay			

### PART NUMBER DESCRIPTION (for information only)

TR	021	6 $\mu\text{H}8$	10 %	R		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
0.022	± 10	35	50	0.028	650	2530
0.027	± 10	35	50	0.030	650	2450
0.033	± 10	35	50	0.035	650	2270
0.039	± 10	35	50	0.035	650	2270
0.047	± 10	35	50	0.04	650	2120
0.056	± 10	35	50	0.05	650	1900
0.068	± 10	35	50	0.06	650	1730
0.082	± 10	35	50	0.07	650	1620
0.10	± 10	30	25	0.08	650	1500
0.12	± 10	30	25	0.09	620	1410
0.15	± 10	30	25	0.10	600	1340
0.18	± 10	30	25	0.12	550	1225
0.22	± 10	30	25	0.14	510	1130
0.27	± 10	30	25	0.16	430	1060
0.33	± 10	30	25	0.20	410	945
0.39	± 10	30	25	0.30	380	775
0.47	± 10	30	25	0.38	340	690
0.56	± 10	30	25	0.50	300	600
0.68	± 10	30	25	0.60	275	550
0.82	± 10	30	25	0.75	250	490
1	± 10	30	25	0.90	230	445
1.2	± 10	25	7.9	0.18	150	1000
1.5	± 10	25	7.9	0.22	140	905
1.8	± 10	25	7.9	0.30	125	775
2.2	± 10	25	7.9	0.40	115	670
2.7	± 10	30	7.9	0.50	100	600
3.3	± 10	35	7.9	0.80	90	475
3.9	± 10	35	7.9	1	82	425
4.7	± 10	35	7.9	1.2	75	385
5.6	± 10	35	7.9	1.8	68	330
6.8	± 10	40	7.9	1.8	60	330
8.2	± 10	40	7.9	2.55	55	265
10	± 10	40	7.9	2.9	50	245
12	± 10	35	2.5	1.9	45	305
15	± 10	40	2.5	2.8	45	250
18	± 10	40	2.5	3.1	40	240
22	± 10	40	2.5	3.3	40	230
27	± 10	40	2.5	3.9	30	215
33	± 10	40	2.5	4	24	210
39	± 10	40	2.5	4.4	22	200
47	± 10	40	2.5	5	20	190
56	± 10	40	2.5	5.3	18	180
68	± 10	40	2.5	6.1	15	170
82	± 10	40	2.5	6.9	14	160
100	± 10	40	2.5	7.7	11.5	150
120	± 10	35	0.79	9.9	9.5	135
150	± 10	35	0.79	11	8.5	120
180	± 10	25	0.79	18	8	100
220	± 10	25	0.79	21	7.2	90
270	± 10	25	0.79	25	6.4	85
330	± 10	25	0.79	34	5.6	70
390	± 10	25	0.79	42	4.5	65
470	± 10	25	0.79	46	4.2	60
560	± 10	25	0.79	52	3.5	55
680	± 10	25	0.79	55	3.3	55
820	± 10	25	0.79	62	3	50
1000	± 10	25	0.79	67	2.5	50
1200	± 10	15	0.25	74	1.6	45
1500	± 10	15	0.25	80	1.2	45



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