



## Inductors, Subminiature, Shielded, Axial Leaded



### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 10\%$  on Q-meter  
**Dielectric Strength:** 700 V<sub>RMS</sub> at sea level  
**Operating Temperature:** -55 °C to +125 °C  
**Self-Resonant Frequency:** Minimum SRF measured with full length leads on grid-dip meter  
**Rating:** Maximum current based on  $\frac{1}{3}$  W dissipation

### MECHANICAL SPECIFICATIONS

**Terminal Strength:** Meets 5 lb pull test

### FEATURES

- Classification is grade 2, class B
- Inductance range is 0.10  $\mu$ H to 1000  $\mu$ H
- High inductance-to-size ratio
- 0.133" [3.38 mm] diameter by 0.335" [8.51 mm] length
- Subminiature shielded inductor
- Solves special problems in density circuit application
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

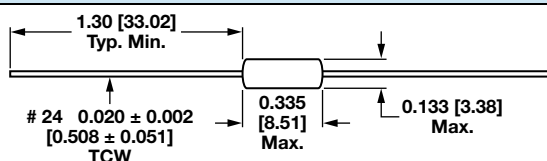


**RoHS**  
COMPLIANT

### DENSITY SPECIFICATIONS

**Weight:** 0.50 g maximum  
**Shielding:** Less than 3 % coupling with two units mounted side by side at 1000 cycles

### DIMENSIONS in inches [millimeters]



### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. ( $\mu$ H)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA) <sup>(1)</sup>	
IMS-2WWD-40	0.10	$\pm 10$	42	25	> 400	0.112	1720	> 1720	PHENOLIC
IMS-2WWD-40	0.12	$\pm 10$	42	25	> 400	0.126	1630	> 1630	
IMS-2WWD-40	0.15	$\pm 10$	42	25	> 400	0.138	1550	> 1550	
IMS-2WWD-40	0.18	$\pm 10$	42	25	366	0.165	1420	> 1420	
IMS-2WWD-40	0.22	$\pm 10$	42	25	331	0.198	1330	> 1330	
IMS-2WWD-40	0.27	$\pm 10$	42	25	298	0.220	1230	> 1230	
IMS-2WWD-40	0.33	$\pm 10$	42	25	288	0.258	1140	> 1140	
IMS-2WWD-40	0.39	$\pm 10$	42	25	271	0.292	1060	> 1060	
IMS-2WWD-40	0.47	$\pm 10$	41	25	247	0.360	960	> 960	
IMS-2WWD-40	0.56	$\pm 10$	39	25	236	0.397	915	> 915	
IMS-2WWD-40	0.68	$\pm 10$	36	25	216	0.472	840	> 840	
IMS-2WWD-40	0.82	$\pm 10$	35	25	200	0.638	720	> 720	
IMS-2WWD-40	1.0	$\pm 10$	42	25	136	0.208	1260	> 1260	
IMS-2WWD-40	1.2	$\pm 10$	38	7.9	120	0.225	1210	> 1210	
IMS-2WWD-40	1.5	$\pm 10$	38	7.9	111	0.265	1120	> 1120	
IMS-2WWD-40	1.8	$\pm 10$	38	7.9	103	0.285	1080	> 1080	
IMS-2WWD-40	2.2	$\pm 10$	36	7.9	94	0.330	1000	> 1000	
IMS-2WWD-40	2.7	$\pm 10$	38	7.9	85	0.381	935	> 935	
IMS-2WWD-40	3.3	$\pm 10$	38	7.9	78	0.432	875	> 875	
IMS-2WWD-40	3.9	$\pm 10$	40	7.9	73	0.576	755	> 755	
IMS-2WWD-40	4.7	$\pm 10$	42	7.9	66	0.787	650	> 650	
IMS-2WWD-40	5.6	$\pm 10$	42	7.9	62	1.04	565	> 565	
IMS-2WWD-40	6.8	$\pm 10$	45	7.9	54	1.40	485	> 485	
IMS-2WWD-40	8.2	$\pm 10$	47	7.9	50	1.68	440	> 440	
IMS-2WWD-40	10	$\pm 10$	51	7.9	44	2.58	355	> 355	
IMS-2WWD-40	12	$\pm 10$	51	2.5	39	3.65	300	> 300	

**Note**

<sup>(1)</sup> Incremental current: The DC current required to cause a 5 % reduction in the nominal inductance value



STANDARD ELECTRICAL SPECIFICATIONS								
MODEL	IND. (μH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA) <sup>(1)</sup>
IMS-2WWD-40	15	± 10	45	2.5	44	0.862	620	200
IMS-2WWD-40	18	± 10	43	2.5	40	1.02	570	175
IMS-2WWD-40	22	± 10	42	2.5	36	1.12	545	160
IMS-2WWD-40	27	± 10	37	2.5	33	1.28	510	155
IMS-2WWD-40	33	± 10	46	2.5	30	1.70	440	150
IMS-2WWD-40	39	± 10	38	2.5	26	1.99	405	145
IMS-2WWD-40	47	± 10	42	2.5	23	2.41	370	140
IMS-2WWD-40	56	± 10	41	2.5	22	2.85	340	130
IMS-2WWD-40	68	± 10	46	2.5	18	3.21	320	120
IMS-2WWD-40	82	± 10	46	2.5	17	3.57	305	115
IMS-2WWD-40	100	± 10	43	2.5	15	4.10	280	100
IMS-2WWD-40	120	± 10	50	0.79	13	5.97	235	80
IMS-2WWD-40	150	± 10	49	0.79	12	7.05	215	68
IMS-2WWD-40	180	± 10	56	0.79	11	8.12	200	64
IMS-2WWD-40	220	± 10	53	0.79	10	14.8	150	60
IMS-2WWD-40	270	± 10	57	0.79	9	16.8	140	58
IMS-2WWD-40	330	± 10	57	0.79	8.5	18.6	130	56
IMS-2WWD-40	390	± 10	57	0.79	8	21.1	120	54
IMS-2WWD-40	470	± 10	50	0.79	7	32.2	100	52
IMS-2WWD-40	560	± 10	50	0.79	6	36.4	95	50
IMS-2WWD-40	680	± 10	56	0.79	5.5	41.1	90	48
IMS-2WWD-40	820	± 10	49	0.79	5	45.0	85	47
IMS-2WWD-40	1000	± 10	49	0.79	4.5	52.0	80	45

FERRITE

**Note**

(1) Incremental current: The DC current required to cause a 5 % reduction in the nominal inductance value

MARKING
- Color coded

ORDERING INFORMATION				
IMS-2WWD-40	0.10 μH	10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER															
I	M	S	0	2	W	W	D	E	R	R	1	0	K	4	0
MODEL							PACKAGE CODE		INDUCTANCE VALUE		INDUCTANCE TOLERANCE		SERIES		



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