

# Inductors

## Subminiature, Shielded


**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" [3.38mm] diameter by 0.335" [8.51mm] length.
- Subminiature shielded inductor.
- Solves special problems in density circuit application.

**ELECTRICAL SPECIFICATIONS**

**Inductance Tolerance:**  $\pm 10\%$  Q-Meter.

**Dielectric Strength:** 700VRMS 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 1/3 watt dissipation.

**MECHANICAL SPECIFICATIONS**

**Terminal Strength:** Meets 5 pound pull test.

**DENSITY SPECIFICATIONS**

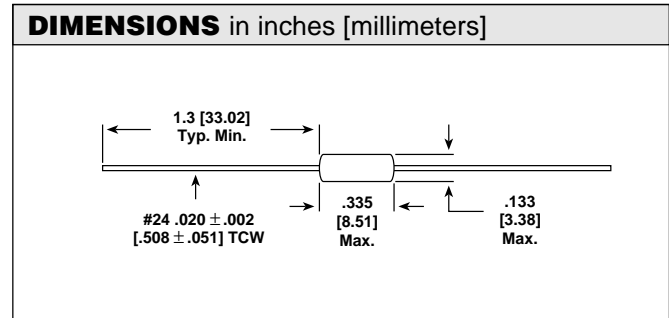
**Weight:** 0.50 gram maximum.

**Shielding:** Less than 3% coupling with two units mounted side by side at 1000 cycles.

STANDARD ELECTRICAL SPECIFICATIONS									
MODEL	IND. ( $\mu$ H)	TOL.	Q MIN.	TEST FREQ. (MHz)	SRF MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCR.* CURRENT (mA)	
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	IRON
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	
IMS-2WWD-40	15	$\pm 10\%$	45	2.5	44	.862	620	200	FERRITE
IMS-2WWD-40	18	$\pm 10\%$	43	2.5	40	1.02	570	175	
IMS-2WWD-40	22	$\pm 10\%$	42	2.5	36	1.12	545	160	
IMS-2WWD-40	27	$\pm 10\%$	37	2.5	33	1.28	510	155	
IMS-2WWD-40	33	$\pm 10\%$	46	2.5	30	1.70	440	150	
IMS-2WWD-40	39	$\pm 10\%$	38	2.5	26	1.99	405	145	
IMS-2WWD-40	47	$\pm 10\%$	42	2.5	23	2.41	370	140	
IMS-2WWD-40	56	$\pm 10\%$	41	2.5	22	2.85	340	130	
IMS-2WWD-40	68	$\pm 10\%$	46	2.5	18	3.21	320	120	
IMS-2WWD-40	82	$\pm 10\%$	46	2.5	17	3.57	305	115	
IMS-2WWD-40	100	$\pm 10\%$	43	2.5	15	4.10	280	100	
IMS-2WWD-40	120	$\pm 10\%$	50	0.79	13	5.97	235	80	
IMS-2WWD-40	150	$\pm 10\%$	49	0.79	12	7.05	215	68	
IMS-2WWD-40	180	$\pm 10\%$	56	0.79	11	8.12	200	64	
IMS-2WWD-40	220	$\pm 10\%$	53	0.79	10	14.8	150	60	
IMS-2WWD-40	270	$\pm 10\%$	57	0.79	9	16.8	140	58	
IMS-2WWD-40	330	$\pm 10\%$	57	0.79	8.5	18.6	130	56	
IMS-2WWD-40	390	$\pm 10\%$	57	0.79	8	21.1	120	54	
IMS-2WWD-40	470	$\pm 10\%$	50	0.79	7	32.2	100	52	
IMS-2WWD-40	560	$\pm 10\%$	50	0.79	6	36.4	95	50	
IMS-2WWD-40	680	$\pm 10\%$	56	0.79	5.5	41.1	90	48	
IMS-2WWD-40	820	$\pm 10\%$	49	0.79	5	45.0	85	47	
IMS-2WWD-40	1000	$\pm 10\%$	49	0.79	4.5	52.0	80	45	

\*Incremental Current: The DC current required to cause a 5% reduction in the nominal inductance value.

**INDUCTANCE TOLERANCE:**  $\pm 10\%$  Q-Meter.  
**DIELECTRIC STRENGTH:** 700VRMS 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 1/3 watt dissipation.



**MARKING**

— Color coded

**ORDERING INFORMATION**

<b>IMS-2WWD-40</b>	<b>0.10<math>\mu</math>H</b>	<b><math>\pm 10\%</math></b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE