

Inductors

Miniature, Shielded



FEATURES

- Miniature shielded inductor.
- High inductance-to-size ratio.
- Inductance range is 0.10μH to 180,000μH.
- Encapsulated non-flammable shielded unit.
- 0.164" [4.17mm] diameter by 0.450" [11.43mm] long envelope.
- Offers extremely high inductance for density packaging.

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10% on Q-Meter for 0.10μH to 22μH.
± 5% on 1KC Bridge for 27μH to 1000μH.

± 10% on 1KC Bridge for 1200μH to 56,000μH.
± 20% on 1KC Bridge measured at point on leads 1/4" [6.35mm] from body for 68,000μH to 180,000μH.

Dielectric Strength: 700V RMS at sea level.

Operating Temperature: - 55°C to + 125°C.

Self-Resonant Frequency: Minimum SRF measured with full length leads on Grid-Dip Meter.

Q: Measured on Q-Meter.

Maximum Current: Based on temperature rise not to exceed 40°C at + 85°C ambient.

MECHANICAL SPECIFICATIONS

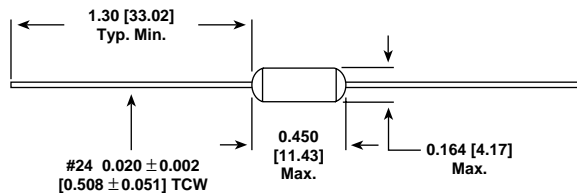
Terminal Strength: Meets 5 pound pull test.

DENSITY SPECIFICATIONS

Weight: 0.75 gram 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. (μH)	TOL.	Q MIN.	TEST FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)	PHENOLIC
IMS-5WD-40	0.10	± 10%	55	25	400	0.020	4000	4000	
IMS-5WD-40	0.12	± 10%	55	25	400	0.029	3350	3350	
IMS-5WD-40	0.15	± 10%	55	25	400	0.032	3000	3000	
IMS-5WD-40	0.18	± 10%	50	25	366	0.040	2850	2850	
IMS-5WD-40	0.22	± 10%	56	25	331	0.045	2700	2700	
IMS-5WD-40	0.27	± 10%	50	25	298	0.08	2000	2000	
IMS-5WD-40	0.33	± 10%	48	25	270	0.09	1900	1900	
IMS-5WD-40	0.39	± 10%	48	25	248	0.16	1420	1420	
IMS-5WD-40	0.47	± 10%	48	25	226	0.17	1400	1400	
IMS-5WD-40	0.56	± 10%	45	25	206	0.36	960	960	
IMS-5WD-40	0.68	± 10%	45	25	188	0.37	940	940	
IMS-5WD-40	0.82	± 10%	41	25	171	0.46	870	870	

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



STANDARD ELECTRICAL SPECIFICATIONS									
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IMS-5WD-40	1.0	± 10%	42	7.9	131	0.062	2300	2300	IRON
IMS-5WD-40	1.2	± 10%	43	7.9	120	0.067	2200	2200	
IMS-5WD-40	1.5	± 10%	41	7.9	108	0.16	1420	1420	
IMS-5WD-40	1.8	± 10%	42	7.9	99	0.17	1370	1370	
IMS-5WD-40	2.2	± 10%	42	7.9	90	0.19	1300	1300	
IMS-5WD-40	2.7	± 10%	41	7.9	86	0.20	1270	1270	
IMS-5WD-40	3.3	± 10%	40	7.9	73	0.31	1030	1030	
IMS-5WD-40	3.9	± 10%	40	7.9	68	0.33	1000	1000	
IMS-5WD-40	4.7	± 10%	40	7.9	61	0.58	750	750	
IMS-5WD-40	5.6	± 10%	40	7.9	56	0.64	710	710	
IMS-5WD-40	6.8	± 10%	40	7.9	51	0.68	680	680	
IMS-5WD-40	8.2	± 10%	45	2.5	46	1.3	500	500	
IMS-5WD-40	10	± 10%	46	2.5	42	1.4	480	480	
IMS-5WD-40	12	± 10%	47	2.5	38	1.5	460	460	
IMS-5WD-40	15	± 10%	47	2.5	34	1.7	440	440	
IMS-5WD-40	18	± 10%	45	2.5	43	0.88	610	235	FERRITE
IMS-5WD-40	22	± 10%	47	2.5	38	0.95	590	220	
IMS-5WD-40	27	± 10%	42	2.5	35	1.15	530	200	
IMS-5WD-40	33	± 10%	43	2.5	32	1.2	520	193	
IMS-5WD-40	39	± 10%	45	2.5	30	1.6	450	183	
IMS-5WD-40	47	± 10%	46	2.5	26	1.8	420	177	
IMS-5WD-40	56	± 10%	40	2.5	24	2.2	390	170	
IMS-5WD-40	68	± 10%	40	2.5	22	2.3	375	165	
IMS-5WD-40	82	± 10%	42	0.79	14	2.4	360	160	
IMS-5WD-40	100	± 10%	63	0.79	12	2.6	345	157	
IMS-5WD-40	120	± 10%	62	0.79	11	2.9	330	145	
IMS-5WD-40	150	± 10%	63	0.79	10	3.3	315	126	
IMS-5WD-40	180	± 10%	60	0.79	9.2	3.6	300	110	
IMS-5WD-40	220	± 10%	57	0.79	8.8	4.1	280	105	
IMS-5WD-40	270	± 10%	52	0.79	8.0	4.8	260	91	
IMS-5WD-40	330	± 10%	50	0.79	7.2	5.6	240	87	
IMS-5WD-40	390	± 10%	43	0.79	6.8	6.2	230	72	
IMS-5WD-40	470	± 10%	66	0.79	6.4	10.0	180	67	
IMS-5WD-40	560	± 10%	64	0.79	6.0	11.5	170	65	
IMS-5WD-40	680	± 10%	71	0.79	5.2	12.0	160	60	
IMS-5WD-40	820	± 10%	67	0.79	4.8	13.8	150	55	
IMS-5WD-40	1000	± 10%	62	0.25	4.5	16.0	140	52	
IMS-5WD-40	1200	± 10%	52	0.25	1.2	18.2	135	50	
IMS-5WD-40	1500	± 10%	51	0.25	1.2	23.7	118	48	
IMS-5WD-40	1800	± 10%	51	0.25	1.1	30.2	105	42	
IMS-5WD-40	2200	± 10%	50	0.25	1.0	33.7	99	37	
IMS-5WD-40	2700	± 10%	51	0.25	0.94	43.1	87	33	
IMS-5WD-40	3300	± 10%	52	0.25	0.84	48.7	82	30	
IMS-5WD-40	3900	± 10%	48	0.25	0.77	62.7	72	29	
IMS-5WD-40	4700	± 10%	48	0.25	0.67	70.5	68	28	
IMS-5WD-40	5600	± 10%	48	0.25	0.65	104	56	24	

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

MARKING
<ul style="list-style-type: none"> — Model — Inductance value — Tolerance — Date code

ORDERING INFORMATION		
IMS-5WD-40	0.10μH	± 10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE