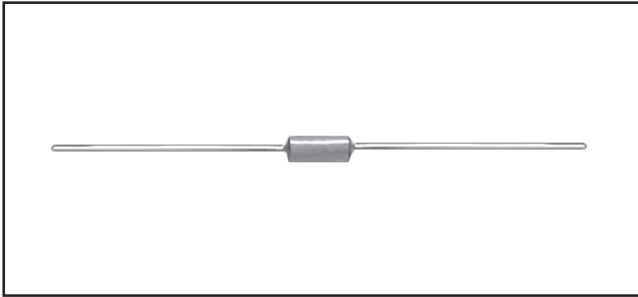




## Inductors

*Miniature, Shielded*



### FEATURES

- Miniature shielded inductor.
- High inductance-to-size ratio.
- Inductance range is .10 $\mu$ H to 180,000 $\mu$ H.
- Encapsulated non-flammable shielded unit.
- .164" [4.17mm] diameter by .450" [11.43mm] long envelope.
- Offers extremely high inductance for density packaging.

### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 10\%$  on Q-Meter for .10 $\mu$ H to 22 $\mu$ H.

$\pm 5\%$  on 1KC Bridge for 27 $\mu$ H to 1000 $\mu$ H.

$\pm 10\%$  on 1KC Bridge for 1200 $\mu$ H to 56,000 $\mu$ H.

$\pm 20\%$  on 1KC Bridge measured at point on leads 1/4" [6.35mm] from body for 68,000 $\mu$ H to 180,000 $\mu$ H.

**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

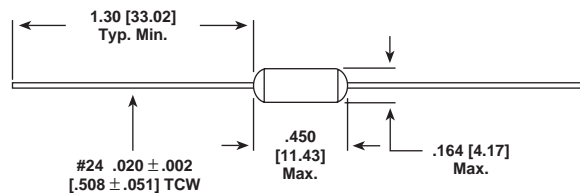
**Terminal Strength:** Meets 5 pound pull test.

### DENSITY SPECIFICATIONS

**Weight:** .75 gram maximum.

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

### DIMENSIONAL CONFIGURATIONS [Numbers in brackets indicate millimeters]



### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. ( $\mu$ H)	TOL.	Q MIN.	TEST FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)
IMS-5WD-40	.10	$\pm 10\%$	55	25	400	.020	4000	4000
IMS-5WD-40	.12	$\pm 10\%$	55	25	400	.029	3350	3350
IMS-5WD-40	.15	$\pm 10\%$	55	25	400	.032	3000	3000
IMS-5WD-40	.18	$\pm 10\%$	50	25	366	.040	2850	2850
IMS-5WD-40	.22	$\pm 10\%$	56	25	331	.045	2700	2700
IMS-5WD-40	.27	$\pm 10\%$	50	25	298	.08	2000	2000
IMS-5WD-40	.33	$\pm 10\%$	48	25	270	.09	1900	1900
IMS-5WD-40	.39	$\pm 10\%$	48	25	248	.16	1420	1420
IMS-5WD-40	.47	$\pm 10\%$	48	25	226	.17	1400	1400
IMS-5WD-40	.56	$\pm 10\%$	45	25	206	.36	960	960
IMS-5WD-40	.68	$\pm 10\%$	45	25	188	.37	940	940
IMS-5WD-40	.82	$\pm 10\%$	41	25	171	.46	870	870

PHENOLIC

\*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 FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)
IMS-5WD-40	1.0	± 10%	42	7.9	131	.062	2300	2300
IMS-5WD-40	1.2	± 10%	43	7.9	120	.067	2200	2200
IMS-5WD-40	1.5	± 10%	41	7.9	108	.16	1420	1420
IMS-5WD-40	1.8	± 10%	42	7.9	99	.17	1370	1370
IMS-5WD-40	2.2	± 10%	42	7.9	90	.19	1300	1300
IMS-5WD-40	2.7	± 10%	41	7.9	86	.20	1270	1270
IMS-5WD-40	3.3	± 10%	40	7.9	73	.31	1030	1030
IMS-5WD-40	3.9	± 10%	40	7.9	68	.33	1000	1000
IMS-5WD-40	4.7	± 10%	40	7.9	61	.58	750	750
IMS-5WD-40	5.6	± 10%	40	7.9	56	.64	710	710
IMS-5WD-40	6.8	± 10%	40	7.9	51	.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	.88	610	235
IMS-5WD-40	22	± 10%	47	2.5	38	.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	.79	14	2.4	360	160
IMS-5WD-40	100	± 10%	63	.79	12	2.6	345	157
IMS-5WD-40	120	± 10%	62	.79	11	2.9	330	145
IMS-5WD-40	150	± 10%	63	.79	10	3.3	315	126
IMS-5WD-40	180	± 10%	60	.79	9.2	3.6	300	110
IMS-5WD-40	220	± 10%	57	.79	8.8	4.1	280	105
IMS-5WD-40	270	± 10%	52	.79	8.0	4.8	260	91
IMS-5WD-40	330	± 10%	50	.79	7.2	5.6	240	87
IMS-5WD-40	390	± 10%	43	.79	6.8	6.2	230	72
IMS-5WD-40	470	± 10%	66	.79	6.4	10.0	180	67
IMS-5WD-40	560	± 10%	64	.79	6.0	11.5	170	65
IMS-5WD-40	680	± 10%	71	.79	5.2	12.0	160	60
IMS-5WD-40	820	± 10%	67	.79	4.8	13.8	150	55
IMS-5WD-40	1000	± 10%	62	.25	4.5	16.0	140	52
IMS-5WD-40	1200	± 10%	52	.25	1.2	18.2	135	50
IMS-5WD-40	1500	± 10%	51	.25	1.2	23.7	118	48
IMS-5WD-40	1800	± 10%	51	.25	1.1	30.2	105	42
IMS-5WD-40	2200	± 10%	50	.25	1.0	33.7	99	37
IMS-5WD-40	2700	± 10%	51	.25	.94	43.1	87	33
IMS-5WD-40	3300	± 10%	52	.25	.84	48.7	82	30
IMS-5WD-40	3900	± 10%	48	.25	.77	62.7	72	29
IMS-5WD-40	4700	± 10%	48	.25	.67	70.5	68	28
IMS-5WD-40	5600	± 10%	48	.25	.65	104	56	24

IRON

FERRITE

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

PART MARKING
— Model
— Inductance value
— Tolerance
— Date code

HOW TO ORDER		
IMS-5WD-40	.10μH	± 10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE