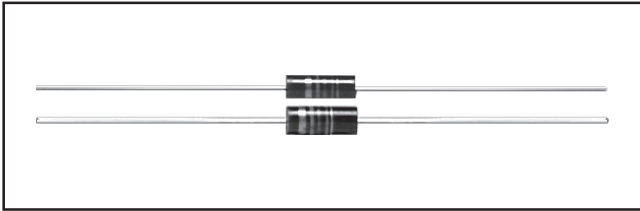


## Inductors

Commercial, Miniature, Molded, Shielded



### FEATURES

- Ultra-reliable molded shielded miniature RF inductor.
- Epoxy molded envelope and shielding.
- Offers reliability, electrical performance and minimum coupling in high density packaging.

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** .1 $\mu$ H to 100,000 $\mu$ H.  
**Inductance Tolerance:**  $\pm$  10%.  
**Dielectric Strength:** 700V RMS at sea level.  
**Operating Temperature:** - 55°C to + 125°C.  
**Self-Resonant Frequency:** Measured per MIL-C-15305 (latest revision).  
**Q:** Measured on a Q-Meter.

**Maximum Current:** Based on temperature rise not to exceed 35°C at + 90°C ambient.

### MECHANICAL SPECIFICATIONS

**Terminal Strength:** Meets 5 pound pull test; three 360° rotations in alternate directions when tested per MIL-C-15305 (latest revision).

### DENSITY SPECIFICATIONS

**Weight:** .75 gram maximum.

**Shielding:** At the test frequency, two units assembled side by side exhibit less than 3% coupling.

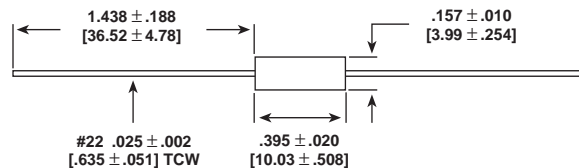
### ENVIRONMENTAL SPECIFICATIONS

**Moisture:** Per MIL-STD-202, Method 106.

**Vibration:** High frequency, 10Hz to 2000Hz @ 20 g  $\pm$  10% maximum for 12 logarithmic swings each of 20 minute duration repeated for each of three mutually perpendicular planes.

**Shock:** 100 g, 6 ms.

### 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-5SWD-65	.10	$\pm$ 10%	50	25	250	.025	2900	2900
IMS-5SWD-65	.12	$\pm$ 10%	51	25	250	.034	2800	2800
IMS-5SWD-65	.15	$\pm$ 10%	51	25	250	.037	2750	2750
IMS-5SWD-65	.18	$\pm$ 10%	50	25	250	.047	2200	2200
IMS-5SWD-65	.22	$\pm$ 10%	49	25	250	.067	1700	1700
IMS-5SWD-65	.27	$\pm$ 10%	47	25	250	.11	1500	1500
IMS-5SWD-65	.33	$\pm$ 10%	46	25	250	.13	1300	1300
IMS-5SWD-65	.39	$\pm$ 10%	44	25	250	.18	1100	1100
IMS-5SWD-65	.47	$\pm$ 10%	44	25	235	.25	1000	1000
IMS-5SWD-65	.56	$\pm$ 10%	43	25	210	.33	900	900
IMS-5SWD-65	.68	$\pm$ 10%	42	25	190	.45	750	750
IMS-5SWD-65	.82	$\pm$ 10%	40	25	180	.59	600	600

PHENOLIC CORE

\*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-5SWD-65	1.0	± 10%	47	25	140	.07	1900	1900
IMS-5SWD-65	1.2	± 10%	46	7.9	130	.093	1600	1600
IMS-5SWD-65	1.5	± 10%	45	7.9	115	.12	1300	1300
IMS-5SWD-65	1.8	± 10%	43	7.9	105	.14	1200	1200
IMS-5SWD-65	2.2	± 10%	45	7.9	100	.19	1100	1100
IMS-5SWD-65	2.7	± 10%	46	7.9	92	.28	950	950
IMS-5SWD-65	3.3	± 10%	44	7.9	85	.35	800	800
IMS-5SWD-65	3.9	± 10%	44	7.9	75	.40	750	750
IMS-5SWD-65	4.7	± 10%	44	7.9	70	.55	650	650
IMS-5SWD-65	5.6	± 10%	47	7.9	65	.72	550	550
IMS-5SWD-65	6.8	± 10%	50	7.9	55	1.02	500	500
IMS-5SWD-65	8.2	± 10%	50	7.9	50	1.32	475	475
IMS-5SWD-65	10	± 10%	49	7.9	46	1.62	450	450
IMS-5SWD-65	12	± 10%	55	2.5	44	2.0	400	400
IMS-5SWD-65	15	± 10%	44	2.5	49	.80	620	250
IMS-5SWD-65	18	± 10%	45	2.5	45	.89	610	235
IMS-5SWD-65	22	± 10%	46	2.5	41	.96	600	220
IMS-5SWD-65	27	± 10%	49	2.5	38	1.19	500	200
IMS-5SWD-65	33	± 10%	45	2.5	34	1.37	490	190
IMS-5SWD-65	39	± 10%	53	2.5	29	1.93	410	180
IMS-5SWD-65	47	± 10%	52	2.5	27	2.11	400	175
IMS-5SWD-65	56	± 10%	49	2.5	25	2.23	380	160
IMS-5SWD-65	68	± 10%	51	2.5	21	2.70	370	150
IMS-5SWD-65	82	± 10%	45	2.5	10.5	2.44	360	140
IMS-5SWD-65	100	± 10%	52	2.5	10	3.12	325	120
IMS-5SWD-65	120	± 10%	57	.79	9.7	3.6	290	95
IMS-5SWD-65	150	± 10%	56	.79	8.5	4.1	275	90
IMS-5SWD-65	180	± 10%	60	.79	8.0	4.4	260	85
IMS-5SWD-65	220	± 10%	58	.79	7.5	5.0	250	80
IMS-5SWD-65	270	± 10%	60	.79	7.0	5.8	240	70
IMS-5SWD-65	330	± 10%	54	.79	6.5	6.4	225	65
IMS-5SWD-65	390	± 10%	67	.79	6.2	7.4	200	60
IMS-5SWD-65	470	± 10%	60	.79	5.7	9.5	180	58
IMS-5SWD-65	560	± 10%	60	.79	4.7	10.5	174	55
IMS-5SWD-65	680	± 10%	60	.79	4.5	11.8	168	50
IMS-5SWD-65	820	± 10%	57	.79	4.2	13.0	152	45
IMS-5SWD-65	1000	± 10%	65	.79	3.8	17.5	135	40
IMS-5SWD-65	1200	± 10%	45	.25	1.5	22.1	115	35
IMS-5SWD-65	1500	± 10%	49	.25	1.2	26.5	110	33
IMS-5SWD-65	1800	± 10%	47	.25	1.0	29.9	105	30
IMS-5SWD-65	2200	± 10%	50	.25	.97	33.8	99	27
IMS-5SWD-65	2700	± 10%	47	.25	.92	47.3	83	25
IMS-5SWD-65	3300	± 10%	43	.25	.84	53.0	80	22
IMS-5SWD-65	3900	± 10%	43	.25	.80	73.8	67	20
IMS-5SWD-65	4700	± 10%	44	.25	.74	81.6	63	19
IMS-5SWD-65	5600	± 10%	45	.25	.73	98.9	56	17

IRON CORE

FERRITE CORE

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

PART MARKING
— Color coded per MIL-C-15305

HOW TO ORDER		
IMS-5SWD-65	.47μH	± 10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE