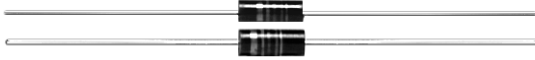


Inductors

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



RoHS
COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Range: 0.1 μ H to 820 μ H
Inductance Tolerance: \pm 10 %
Dielectric Strength: 700 VRMS at sea level
Operating Temperature: - 55 $^{\circ}$ C to + 125 $^{\circ}$ C
Self-Resonant Frequency: Measured per MIL-PRF-15305 (latest revision)
Q: Measured on a Q-Meter
Maximum Current: Based on temperature rise not to exceed 35 $^{\circ}$ C at + 90 $^{\circ}$ C ambient

MECHANICAL SPECIFICATIONS

Terminal Strength: Meets 5 pound pull test; three 360 $^{\circ}$ rotations in alternate directions when tested per MIL-PRF-15305 (latest revision).

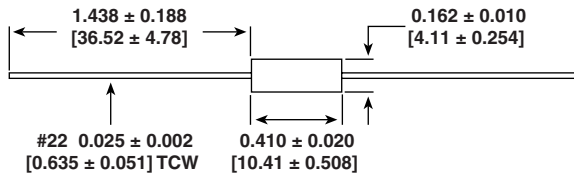
DENSITY SPECIFICATIONS

Weight: 0.75 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, 10 Hz to 2000 Hz at 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

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μ H)	TOL.	Q MIN.	TEST FREQ. (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)	PHENOLIC CORE
IMS-5SWD-65	0.10	\pm 10 %	50	25	250	0.025	2900	2900	
IMS-5SWD-65	0.12	\pm 10 %	51	25	250	0.034	2800	2800	
IMS-5SWD-65	0.15	\pm 10 %	51	25	250	0.037	2750	2750	
IMS-5SWD-65	0.18	\pm 10 %	50	25	250	0.047	2200	2200	
IMS-5SWD-65	0.22	\pm 10 %	49	25	250	0.067	1700	1700	
IMS-5SWD-65	0.27	\pm 10 %	47	25	250	0.11	1500	1500	
IMS-5SWD-65	0.33	\pm 10 %	46	25	250	0.13	1300	1300	
IMS-5SWD-65	0.39	\pm 10 %	44	25	250	0.18	1100	1100	
IMS-5SWD-65	0.47	\pm 10 %	44	25	235	0.25	1000	1000	
IMS-5SWD-65	0.56	\pm 10 %	43	25	210	0.33	900	900	
IMS-5SWD-65	0.68	\pm 10 %	42	25	190	0.45	750	750	
IMS-5SWD-65	0.82	\pm 10 %	40	25	180	0.59	600	600	

*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. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)
IMS-5SWD-65	1.0	± 10 %	47	25	140	0.07	1900	1900
IMS-5SWD-65	1.2	± 10 %	46	7.9	130	0.093	1600	1600
IMS-5SWD-65	1.5	± 10 %	45	7.9	115	0.12	1300	1300
IMS-5SWD-65	1.8	± 10 %	43	7.9	105	0.14	1200	1200
IMS-5SWD-65	2.2	± 10 %	45	7.9	100	0.19	1100	1100
IMS-5SWD-65	2.7	± 10 %	46	7.9	92	0.28	950	950
IMS-5SWD-65	3.3	± 10 %	44	7.9	85	0.35	800	800
IMS-5SWD-65	3.9	± 10 %	44	7.9	75	0.40	750	750
IMS-5SWD-65	4.7	± 10 %	44	7.9	70	0.55	650	650
IMS-5SWD-65	5.6	± 10 %	47	7.9	65	0.72	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	0.80	620	250
IMS-5SWD-65	18	± 10 %	45	2.5	45	0.89	610	235
IMS-5SWD-65	22	± 10 %	46	2.5	41	0.96	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	0.79	9.7	3.6	290	95
IMS-5SWD-65	150	± 10 %	56	0.79	8.5	4.1	275	90
IMS-5SWD-65	180	± 10 %	60	0.79	8.0	4.4	260	85
IMS-5SWD-65	220	± 10 %	58	0.79	7.5	5.0	250	80
IMS-5SWD-65	270	± 10 %	60	0.79	7.0	5.8	240	70
IMS-5SWD-65	330	± 10 %	54	0.79	6.5	6.4	225	65
IMS-5SWD-65	390	± 10 %	67	0.79	6.2	7.4	200	60
IMS-5SWD-65	470	± 10 %	60	0.79	5.7	9.5	180	58
IMS-5SWD-65	560	± 10 %	60	0.79	4.7	10.5	174	55
IMS-5SWD-65	680	± 10 %	60	0.79	4.5	11.8	168	50
IMS-5SWD-65	820	± 10 %	57	0.79	4.2	13.0	152	45

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

MARKING
- Color coded per MIL-PRF-15305

ORDERING INFORMATION				
IMS-5SWD-65	0.47 μH	10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER														
I	M	S	5	S	W	D	E	R	R	4	7	K	6	5
MODEL						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES		



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