

Inductors

Commercial, Subminiature, Molded, Shielded



FEATURES

- Classification is Grade 1, Class A
- Ultra-reliable molded shielded inductor
- Inductance range is 0.10 μ H to 10 000 μ H
- 0.136" [3.45 mm] diameter by 0.335" [8.51 mm] length
- Molded epoxy envelope
- Subminiature size for high density circuits and high inductance-to-size ratio
- Utmost reliability, electrical performance and minimum coupling in high density packaging


RoHS
COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ on Q-Meter at specified frequency

Dielectric Strength: 700 VRMS at sea level

Operating Temperature: - 55 °C to + 105 °C

Self-Resonant Frequency: Measured per MIL-PRF-15305

Q: Measured on a Q-Meter at specified frequency

Rating: Maximum based on 1/3 watt dissipation

MECHANICAL SPECIFICATIONS

Terminal Strength: Meets five pound pull test; three 360° rotations in alternate directions per MIL-PRF-15305 (latest revision)

DENSITY SPECIFICATIONS

Weight: 0.50 gram maximum

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

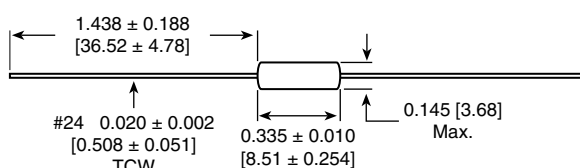
ENVIRONMENTAL SPECIFICATIONS

Moisture: Meets requirements of MIL-PRF-15305

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. MIN. (MHz)	SELF- RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)	
IMS-2SWWD-3	0.10	$\pm 10\%$	42	25	480	0.087	1038	> 1650	PHENOLIC
IMS-2SWWD-3	0.12	$\pm 10\%$	42	25	460	0.090	1021	> 1630	
IMS-2SWWD-3	0.15	$\pm 10\%$	42	25	400	0.098	978	> 1550	
IMS-2SWWD-3	0.18	$\pm 10\%$	42	25	360	0.117	895	> 1420	
IMS-2SWWD-3	0.22	$\pm 10\%$	42	25	340	0.141	815	> 1330	
IMS-2SWWD-3	0.27	$\pm 10\%$	42	25	320	0.157	773	> 1230	
IMS-2SWWD-3	0.33	$\pm 10\%$	42	25	295	0.178	726	> 1140	
IMS-2SWWD-3	0.39	$\pm 10\%$	42	25	275	0.208	671	> 1060	
IMS-2SWWD-3	0.47	$\pm 10\%$	41	25	250	0.257	604	> 960	
IMS-2SWWD-3	0.56	$\pm 10\%$	39	25	238	0.283	576	> 915	
IMS-2SWWD-3	0.68	$\pm 10\%$	36	25	224	0.337	527	> 840	
IMS-2SWWD-3	0.82	$\pm 10\%$	35	25	205	0.470	447	> 720	

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

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (μ H)	TOL.	Q MIN.	TEST FREQ. MIN. (MHz)	SELF- RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	RATED DC CURRENT (mA)	INCREMENTAL* CURRENT (mA)	
IMS-2SWWD-30	1.0	$\pm 10\%$	38	25	135	0.170	678	> 1180	IRON
IMS-2SWWD-30	1.2	$\pm 10\%$	38	7.9	124	0.177	664	> 1150	
IMS-2SWWD-30	1.5	$\pm 10\%$	38	7.9	114	0.212	607	> 1050	
IMS-2SWWD-30	1.8	$\pm 10\%$	38	7.9	105	0.242	568	> 990	
IMS-2SWWD-30	2.2	$\pm 10\%$	38	7.9	95	0.263	545	> 950	
IMS-2SWWD-30	2.7	$\pm 10\%$	38	7.9	85	0.300	510	> 880	
IMS-2SWWD-30	3.3	$\pm 10\%$	38	7.9	78	0.345	476	> 820	
IMS-2SWWD-30	3.9	$\pm 10\%$	42	7.9	74	0.411	436	> 755	
IMS-2SWWD-30	4.7	$\pm 10\%$	42	7.9	68	0.562	373	> 650	
IMS-2SWWD-30	5.6	$\pm 10\%$	42	7.9	62	0.742	324	> 565	
IMS-2SWWD-30	6.8	$\pm 10\%$	45	7.9	55	1.00	280	> 485	
IMS-2SWWD-30	8.2	$\pm 10\%$	47	7.9	51	1.20	255	> 440	
IMS-2SWWD-30	10	$\pm 10\%$	51	7.9	45	1.84	206	> 335	
IMS-2SWWD-30	12	$\pm 10\%$	51	2.5	41	2.60	173	> 300	
IMS-2SWWD-30	15	$\pm 10\%$	35	2.5	48	0.635	314	200	FERRITE
IMS-2SWWD-30	18	$\pm 10\%$	35	2.5	44	0.728	293	175	
IMS-2SWWD-30	22	$\pm 10\%$	35	2.5	37	0.825	275	160	
IMS-2SWWD-30	27	$\pm 10\%$	35	2.5	32	0.950	256	155	
IMS-2SWWD-30	33	$\pm 10\%$	36	2.5	30	1.26	223	150	
IMS-2SWWD-30	39	$\pm 10\%$	36	2.5	27	1.42	210	145	
IMS-2SWWD-30	47	$\pm 10\%$	36	2.5	23	1.72	191	140	
IMS-2SWWD-30	56	$\pm 10\%$	38	2.5	21	2.03	175	130	
IMS-2SWWD-30	68	$\pm 10\%$	38	2.5	18.5	2.29	165	120	
IMS-2SWWD-30	82	$\pm 10\%$	36	2.5	17.0	2.55	157	115	
IMS-2SWWD-30	100	$\pm 10\%$	36	2.5	15.5	2.92	146	100	
IMS-2SWWD-30	120	$\pm 10\%$	43	0.79	14.5	3.30	154	80	
IMS-2SWWD-30	150	$\pm 10\%$	43	0.79	13.0	4.30	147	68	
IMS-2SWWD-30	180	$\pm 10\%$	43	0.79	11.5	5.40	120	64	
IMS-2SWWD-30	220	$\pm 10\%$	45	0.79	10.0	6.65	108	60	
IMS-2SWWD-30	270	$\pm 10\%$	47	0.79	9.5	7.6	101	58	
IMS-2SWWD-30	330	$\pm 10\%$	47	0.79	8.5	8.5	96	56	
IMS-2SWWD-30	390	$\pm 10\%$	47	0.79	8.0	10.0	88	54	
IMS-2SWWD-30	470	$\pm 10\%$	47	0.79	7.2	13.5	76	52	
IMS-2SWWD-30	560	$\pm 10\%$	51	0.79	6.4	14.5	73	50	
IMS-2SWWD-30	680	$\pm 10\%$	51	0.79	5.8	6.0	70	48	
IMS-2SWWD-30	820	$\pm 10\%$	48	0.79	5.3	19.0	64	47	
IMS-2SWWD-30	1000	$\pm 10\%$	48	0.79	4.8	21.5	60	45	
IMS-2SWWD-30	1200	$\pm 10\%$	45	0.25	2.9	23	52	40	
IMS-2SWWD-30	1500	$\pm 10\%$	45	0.25	2.8	30	46	35	
IMS-2SWWD-30	1800	$\pm 10\%$	45	0.25	2.6	33	44	32	

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

MARKING

- Color coded per MIL-PRF-15305 (latest revision)



ORDERING INFORMATION

IMS-2SWWD-30	1.0 μ H	10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	S	2	S	W	W	D	E	R	1	R	0	K	3	0
MODEL							PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES		



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