Inductors

Commercial, Subminiature, Molded, Shielded

FEATURES

- Classification is Grade 1, Class A
- Ultra-reliable molded shielded inductor
- Inductance range is 0.10 µH to 10 000 µH
- 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

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 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

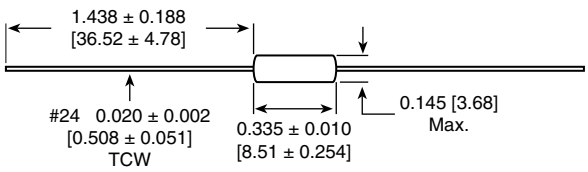
ENVIRONMENTAL SPECIFICATIONS

Moisture: Meets requirements of MIL-PRF-15305

Vibration: High frequency, 10 Hz to 2000 Hz at 20 g ± 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. (µH)	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	± 10 %	42	25	480	0.087	1038	> 1650	PHENOLIC
IMS-2SWWD-3	0.12	± 10 %	42	25	460	0.090	1021	> 1630	
IMS-2SWWD-3	0.15	± 10 %	42	25	400	0.098	978	> 1550	
IMS-2SWWD-3	0.18	± 10 %	42	25	360	0.117	895	> 1420	
IMS-2SWWD-3	0.22	± 10 %	42	25	340	0.141	815	> 1330	
IMS-2SWWD-3	0.27	± 10 %	42	25	320	0.157	773	> 1230	
IMS-2SWWD-3	0.33	± 10 %	42	25	295	0.178	726	> 1140	
IMS-2SWWD-3	0.39	± 10 %	42	25	275	0.208	671	> 1060	
IMS-2SWWD-3	0.47	± 10 %	41	25	250	0.257	604	> 960	
IMS-2SWWD-3	0.56	± 10 %	39	25	238	0.283	576	> 915	
IMS-2SWWD-3	0.68	± 10 %	36	25	224	0.337	527	> 840	
IMS-2SWWD-3	0.82	± 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. (µH)	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	± 10 %	38	25	135	0.170	678	> 1180	IRON
IMS-2SWWD-30	1.2	± 10 %	38	7.9	124	0.177	664	> 1150	
IMS-2SWWD-30	1.5	± 10 %	38	7.9	114	0.212	607	> 1050	
IMS-2SWWD-30	1.8	± 10 %	38	7.9	105	0.242	568	> 990	
IMS-2SWWD-30	2.2	± 10 %	38	7.9	95	0.263	545	> 950	
IMS-2SWWD-30	2.7	± 10 %	38	7.9	85	0.300	510	> 880	
IMS-2SWWD-30	3.3	± 10 %	38	7.9	78	0.345	476	> 820	
IMS-2SWWD-30	3.9	± 10 %	42	7.9	74	0.411	436	> 755	
IMS-2SWWD-30	4.7	± 10 %	42	7.9	68	0.562	373	> 650	
IMS-2SWWD-30	5.6	± 10 %	42	7.9	62	0.742	324	> 565	
IMS-2SWWD-30	6.8	± 10 %	45	7.9	55	1.00	280	> 485	
IMS-2SWWD-30	8.2	± 10 %	47	7.9	51	1.20	255	> 440	
IMS-2SWWD-30	10	± 10 %	51	7.9	45	1.84	206	> 335	
IMS-2SWWD-30	12	± 10 %	51	2.5	41	2.60	173	> 300	
IMS-2SWWD-30	15	± 10 %	35	2.5	48	0.635	314	200	FERRITE
IMS-2SWWD-30	18	± 10 %	35	2.5	44	0.728	293	175	
IMS-2SWWD-30	22	± 10 %	35	2.5	37	0.825	275	160	
IMS-2SWWD-30	27	± 10 %	35	2.5	32	0.950	256	155	
IMS-2SWWD-30	33	± 10 %	36	2.5	30	1.26	223	150	
IMS-2SWWD-30	39	± 10 %	36	2.5	27	1.42	210	145	
IMS-2SWWD-30	47	± 10 %	36	2.5	23	1.72	191	140	
IMS-2SWWD-30	56	± 10 %	38	2.5	21	2.03	175	130	
IMS-2SWWD-30	68	± 10 %	38	2.5	18.5	2.29	165	120	
IMS-2SWWD-30	82	± 10 %	36	2.5	17.0	2.55	157	115	
IMS-2SWWD-30	100	± 10 %	36	2.5	15.5	2.92	146	100	
IMS-2SWWD-30	120	± 10 %	43	0.79	14.5	3.30	154	80	
IMS-2SWWD-30	150	± 10 %	43	0.79	13.0	4.30	147	68	
IMS-2SWWD-30	180	± 10 %	43	0.79	11.5	5.40	120	64	
IMS-2SWWD-30	220	± 10 %	45	0.79	10.0	6.65	108	60	
IMS-2SWWD-30	270	± 10 %	47	0.79	9.5	7.6	101	58	
IMS-2SWWD-30	330	± 10 %	47	0.79	8.5	8.5	96	56	
IMS-2SWWD-30	390	± 10 %	47	0.79	8.0	10.0	88	54	
IMS-2SWWD-30	470	± 10 %	47	0.79	7.2	13.5	76	52	
IMS-2SWWD-30	560	± 10 %	51	0.79	6.4	14.5	73	50	
IMS-2SWWD-30	680	± 10 %	51	0.79	5.8	6.0	70	48	
IMS-2SWWD-30	820	± 10 %	48	0.79	5.3	19.0	64	47	
IMS-2SWWD-30	1000	± 10 %	48	0.79	4.8	21.5	60	45	
IMS-2SWWD-30	1200	± 10 %	45	0.25	2.9	23	52	40	
IMS-2SWWD-30	1500	± 10 %	45	0.25	2.8	30	46	35	
IMS-2SWWD-30	1800	± 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)

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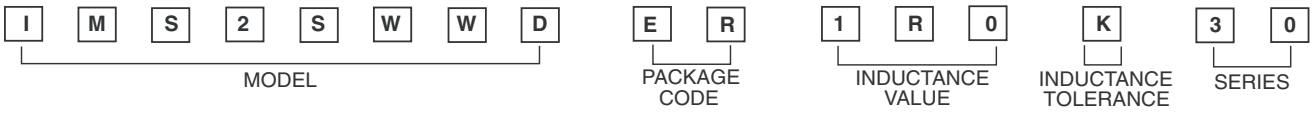
ORDERING INFORMATION

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

GLOBAL PART NUMBER



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