

Inductors

Commercial, Subminiature, Molded, Shielded



FEATURES

- Classification is Grade 1, Class A.
- Ultra-reliable molded shielded inductor.
- Inductance range is 0.10μH to 10000μH.
- 0.136" [3.45mm] diameter by 0.335" [8.51mm] 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.

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10% on Q-Meter at specified frequency.

Dielectric Strength: 700VRMS at sea level.

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

Self-Resonant Frequency: Measured per MIL-C-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-C-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.

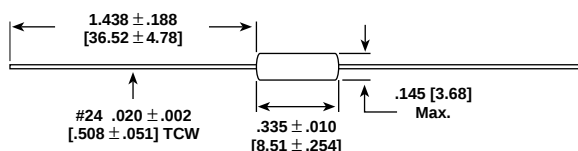
ENVIRONMENTAL SPECIFICATIONS

Moisture: Meets requirements of MIL-C-15305.

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

Shock: 100g, 6ms.

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)	PHENOLIC
IMS-2SWWD-30	0.10	± 10%	42	25	480	0.087	1038	> 1650	
IMS-2SWWD-30	0.12	± 10%	42	25	460	0.090	1021	> 1630	
IMS-2SWWD-30	0.15	± 10%	42	25	400	0.098	978	> 1550	
IMS-2SWWD-30	0.18	± 10%	42	25	360	0.117	895	> 1420	
IMS-2SWWD-30	0.22	± 10%	42	25	340	0.141	815	> 1330	
IMS-2SWWD-30	0.27	± 10%	42	25	320	0.157	773	> 1230	
IMS-2SWWD-30	0.33	± 10%	42	25	295	0.178	726	> 1140	
IMS-2SWWD-30	0.39	± 10%	42	25	275	0.208	671	> 1060	
IMS-2SWWD-30	0.47	± 10%	41	25	250	0.257	604	> 960	
IMS-2SWWD-30	0.56	± 10%	39	25	238	0.283	576	> 915	
IMS-2SWWD-30	0.68	± 10%	36	25	224	0.337	527	> 840	
IMS-2SWWD-30	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								
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IMS-2SWWD-30	1.0	$\pm 10\%$	38	25	135	0.170	678	> 1180
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	1.0	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
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	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-C-15305 (latest revision)

ORDERING INFORMATION		
IMS-2SWWD-30	1μH	± 10%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE