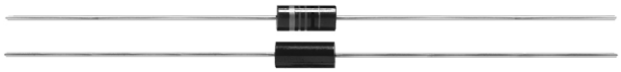
IM-6-RFCS-40

Vishay Dale

Inductors, Commercial, Molded, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 % on Q-meter for 0.10 µH to 22 µH, ± 5 % 1000 cps bridge for 27 µH to 100 µH, ± 5 % on Q-meter for 120 µH to 1000 µH

Note

- L and Q are not always tested at the same frequency, inductance values that are tested on Q-meter, are tested at standard test frequencies

Dielectric Strength: 700 V_{RMS} at sea level

Operating Temperature: -55 °C to +125 °C

Self-Resonant Frequency: Minimum SRF measured with full length leads on grid-dip meter

Q: Measured on Q-meter

DENSITY SPECIFICATIONS

Weight: 0.9 g maximum

FEATURES

- Classification is grade 1, class B
- Inductance range is 0.10 µH to 1000 µH
- Proven reliability molded inductors
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free RoHS COMPLIANT

MECHANICAL SPECIFICATIONS

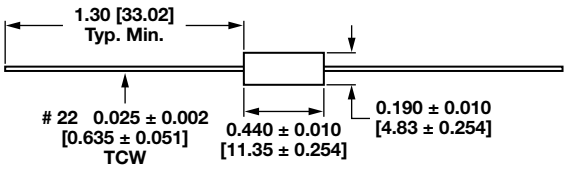
Terminal Strength: Meets 5 lb pull per MIL-PRF-15305 (latest revision)

ENVIRONMENTAL SPECIFICATIONS

Moisture and Shock Resistance: Meets requirements of MIL-PRF-15305, grade 1, class B

Vibration: High frequency, 10 Hz to 2000 Hz at 20 g ± 10 % maximum for 12 logarythmic swings, each of 20 min duration repeated for each of three mutually perpendicular planes

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

MODEL (1)	IND. (µH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	
IM-6RFCS-40	0.10	± 10	75	50	400	0.02	4000	PHENOLIC CORE
IM-6RFCS-40	0.12	± 10	75	50	400	0.025	3500	
IM-6RFCS-40	0.15	± 10	75	50	400	0.03	3000	
IM-6RFCS-40	0.18	± 10	75	50	400	0.03	3000	
IM-6RFCS-40	0.22	± 10	75	50	400	0.03	3000	
IM-6RFCS-40	0.27	± 10	70	45	376	0.04	2700	
IM-6RFCS-40	0.33	± 10	70	40	352	0.05	2500	
IM-6RFCS-40	0.39	± 10	65	40	320	0.08	2000	
IM-6RFCS-40	0.47	± 10	60	25	288	0.08	2000	
IM-6RFCS-40	0.56	± 10	55	25	264	0.10	1700	
IM-6RFCS-40	0.68	± 10	55	25	240	0.12	1500	
IM-6RFCS-40	0.82	± 10	50	25	220	0.18	1300	
IM-6RFCS-40	1.0	± 10	50	20	200	0.24	1100	
IM-6RFCS-40	1.2	± 10	45	20	176	0.35	1000	
IM-6RFCS-40	1.5	± 10	45	15	160	0.43	850	
IM-6RFCS-40	1.8	± 10	45	15	144	0.65	720	
IM-6RFCS-40	2.2	± 10	45	15	132	0.80	610	

Note

(1) Model electricals and tolerances shown

For technical questions, contact: magnetics@vishay.com

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STANDARD ELECTRICAL SPECIFICATIONS

MODEL [1]	IND. (µH)	TOL. (%)	Q MIN.	TEST FREQUENCY (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	
IM-6RFCS-40	2.7	± 10	55	10	88	0.12	1600	IRON CORE
IM-6RFCS-40	3.3	± 10	55	10	80	0.15	1400	
IM-6RFCS-40	3.9	± 10	60	10	76	0.23	1200	
IM-6RFCS-40	4.7	± 10	70	7.9	72	0.30	1000	
IM-6RFCS-40	5.6	± 10	65	7.9	64	0.45	900	
IM-6RFCS-40	6.8	± 10	65	7.9	56	0.55	800	
IM-6RFCS-40	8.2	± 10	60	7.9	52	0.65	720	
IM-6RFCS-40	10	± 10	60	5.0	48	0.73	650	
IM-6RFCS-40	12	± 10	65	5.0	42	1.1	590	
IM-6RFCS-40	15	± 10	80	2.5	38	1.4	500	
IM-6RFCS-40	18	± 10	75	2.5	34	1.6	460	
IM-6RFCS-40	22	± 10	75	2.5	32	1.8	430	
IM-6RFCS-40	27	± 5	75	2.5	29	2.7	360	
IM-6RFCS-40	33	± 5	85	2.5	26	3.5	300	
IM-6RFCS-40	39	± 5	80	2.5	21	3.8	290	
IM-6RFCS-40	47	± 5	80	2.5	18	4.0	275	
IM-6RFCS-40	56	± 5	75	2.5	15	4.4	265	
IM-6RFCS-40	68	± 5	75	2.5	13	4.7	250	
IM-6RFCS-40	82	± 5	75	2.5	10	5.3	235	
IM-6RFCS-40	100	± 5	75	1.5	8.0	6.0	220	
IM-6RFCS-40	120	± 5	65	0.79	5.7	5.0	170	
IM-6RFCS-40	150	± 5	65	0.79	5.4	5.8	164	
IM-6RFCS-40	180	± 5	65	0.79	5.0	6.6	158	
IM-6RFCS-40	220	± 5	65	0.79	4.7	7.4	155	
IM-6RFCS-40	270	± 5	65	0.79	4.5	8.0	150	
IM-6RFCS-40	300	± 5	65	0.79	4.2	8.6	145	
IM-6RFCS-40	330	± 5	65	0.79	4.0	8.9	142	
IM-6RFCS-40	360	± 5	65	0.79	3.8	9.6	137	
IM-6RFCS-40	390	± 5	65	0.79	3.6	9.9	135	
IM-6RFCS-40	430	± 5	65	0.79	3.4	10.4	131	
IM-6RFCS-40	470	± 5	65	0.79	3.2	10.9	128	
IM-6RFCS-40	510	± 5	65	0.79	3.0	11.6	124	
IM-6RFCS-40	560	± 5	65	0.79	2.9	11.8	123	
IM-6RFCS-40	620	± 5	60	0.79	2.8	12.5	120	
IM-6RFCS-40	680	± 5	60	0.79	2.7	13.5	115	
IM-6RFCS-40	750	± 5	60	0.79	2.6	14.0	113	
IM-6RFCS-40	820	± 5	60	0.79	2.5	15.0	110	
IM-6RFCS-40	910	± 5	60	0.79	2.4	15.5	107	
IM-6RFCS-40	1000	± 5	60	0.79	2.2	16.5	104	

Note
[1] Model electricals and tolerances shown

MARKING

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

ORDERING INFORMATION

IM-6RFCS-40	10 µH	± 10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	0	6	R	F	C	S	E	R	1	0	0	K	4	0
MODEL								PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

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