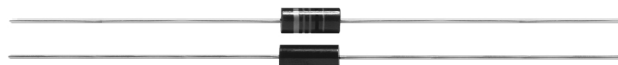


Inductors, Commercial, Molded, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Tolerance: $\pm 10\%$ on Q-meter for 0.10 μH to 22 μH , $\pm 5\%$ 1000 cps bridge for 27 μH to 100 μH , $\pm 5\%$ 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: $-55\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$

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
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT

MECHANICAL SPECIFICATIONS

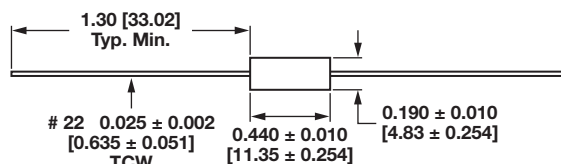
Terminal Strength: Meets 5 lb pull per MIL-PRF-15305 (latest revision)

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 $\pm 10\%$ maximum for 12 logarithmic 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



STANDARD ELECTRICAL SPECIFICATIONS

MODEL ⁽¹⁾	IND. (μ H)	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 μ H	± 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	



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.