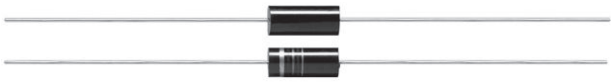
Inductors, Commercial, Molded, Axial Leaded



FEATURES

- Inductance range is 1 µH to 2200 µH
- Proven reliability molded inductors
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 % on Q-Meter for 1 µH to 22 µH. ± 5 % 1000 cps bridge for 27 µH to 2200 µH

Note

- L and Q are not always tested at the same frequency. Inductance values 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

Rating: 1/3 watt dissipation for M Models

MECHANICAL SPECIFICATIONS

Terminal Strength: Meets 5 pound pull test when tested per MIL-PRF-15305

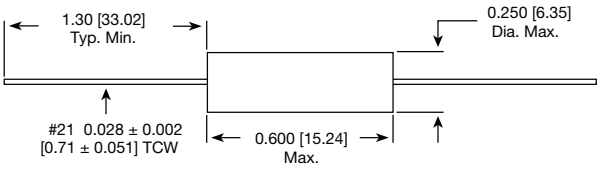
DENSITY SPECIFICATIONS

Weight: 2 g maximum

ENVIRONMENTAL SPECIFICATIONS

Moisture: Meets requirements of MIL-PRF-15305
Shock Resistance: 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 minduration repeated for each of three mutually perpendicular planes.

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

MODEL (1)	IND. (µH)	TOL. (%)	Q MIN.	TEST FREQ. (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (1) (mA)	
IM-10RFCM-13	1.0	± 10	100	15	136	0.04	2700	IRON CORE
IM-10RFCM-13	1.2	± 10	100	15	124	0.04	2700	
IM-10RFCM-13	1.5	± 10	100	10	112	0.04	2700	
IM-10RFCM-13	1.8	± 10	95	10	100	0.05	2500	
IM-10RFCM-13	2.2	± 10	95	10	88	0.05	2500	
IM-10RFCM-13	2.7	± 10	68	7.9	76	0.05	2500	
IM-10RFCM-13	3.3	± 10	60	7.9	72	0.05	2500	
IM-10RFCM-13	3.9	± 10	60	7.9	70	0.07	2100	
IM-10RFCM-13	4.7	± 10	60	7.9	60	0.09	1800	
IM-10RFCM-13	5.6	± 10	65	7.9	56	0.14	1550	
IM-10RFCM-13	6.8	± 10	70	7.9	52	0.17	1300	
IM-10RFCM-13	8.2	± 10	65	7.9	46	0.25	1150	
IM-10RFCM-13	10	± 10	65	5	40	0.32	1000	
IM-10RFCM-13	12	± 10	65	5	36	0.47	870	

Note

(1) Model electricals and tolerances shown.

STANDARD ELECTRICAL SPECIFICATIONS

MODEL [1]	IND. (µH)	TOL. (%)	Q MIN.	TEST FREQ. (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT [1] (mA)	
IM-10RFCM-13	15	± 10	75	4	32	0.62	730	IRON CORE
IM-10RFCM-13	18	± 10	65	4	30	0.72	660	
IM-10RFCM-13	22	± 10	65	2.5	28	0.80	600	
IM-10RFCM-13	27	± 5	65	2.5	25	1.2	520	
IM-10RFCM-13	33	± 5	80	2.5	22	1.5	450	
IM-10RFCM-13	39	± 5	80	2.5	20	2.3	380	
IM-10RFCM-13	47	± 5	100	2.5	19	3.0	300	
IM-10RFCM-13	56	± 5	100	2.5	18	4.2	270	
IM-10RFCM-13	68	± 5	100	2.5	16	5.2	250	
IM-10RFCM-13	82	± 5	100	2.5	14	6.2	220	
IM-10RFCM-13	100	± 5	100	1.5	13	7.0	200	
IM-10RFCM-13	120	± 5	95	1.5	11	7.5	200	
IM-10RFCM-13	150	± 5	90	1	9	8	190	
IM-10RFCM-13	180	± 5	85	1	7	9	185	
IM-10RFCM-13	220	± 5	85	1	5.5	10	180	
IM-10RFCM-13	270	± 5	80	1	4.5	11	172	
IM-10RFCM-13	330	± 5	80	0.80	3.5	12	165	
IM-10RFCM-13	390	± 5	75	0.80	3.0	13	157	
IM-10RFCM-13	470	± 5	75	0.80	2.8	14	150	
IM-10RFCM-13	560	± 5	65	0.80	2.5	16	145	
IM-10RFCM-13	680	± 5	65	0.80	2.2	17	140	
IM-10RFCM-13	820	± 5	65	0.80	2.0	19	132	
IM-10RFCM-13	1000	± 5	70	0.80	1.8	21	125	
IM-10RFCM-13	1200	± 5	60	0.25	2.2	22	120	
IM-10RFCM-13	220	± 5	70	0.25	1.6	30	100	

Note

[1] Model electricals and tolerances shown.

MARKING

- Color coded

ORDERING INFORMATION

IM-10RFCM-13	1.0 µH	10 %	EZ	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	1	0	R	F	C	M	E	Z	1	R	0	K	1	3
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.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Vishay:

IM10RFCMRA1R0K13 IM10RFCMRA100K13 IM10RFCMRA2R2K13 IM10RFCMRA3R9K13 IM10RFCMRA4R7K13