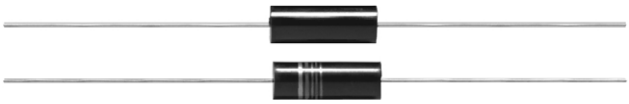
IM-10RFCL-12

Vishay Dale

Inductors, Commercial, Molded, Axial Leaded



ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 % on Q-meter for 1 µH to 22 µH ± 5 % 1000 cps bridge for 27 µH to 10 000 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 a Q-meter

Rating: $^1/_2$ W dissipation for L models

MECHANICAL SPECIFICATIONS

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

FEATURES

- Miniature shielded inductor
- High inductance-to-size ratio
- Inductance range is 0.10 µH to 180 000 µH
- Encapsulated non-flammable shielded unit
- 0.164" [4.17 mm] diameter by 0.450" [11.43 mm] long envelope
- Offers extremely high inductance for density packaging
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

DENSITY SPECIFICATIONS

Weight: 4.1 g maximum

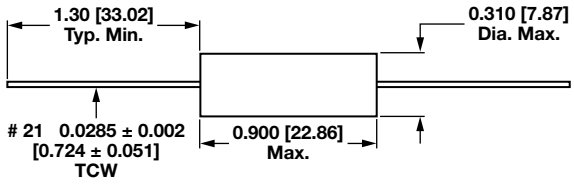
ENVIRONMENTAL SPECIFICATIONS

Moisture Resistance: 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 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 Q (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	
IM-10RFCL-12	1.0	± 10	130	15	136	0.03	4000	
IM-10RFCL-12	1.2	± 10	130	15	124	0.03	4000	
IM-10RFCL-12	1.5	± 10	130	10	112	0.03	4000	
IM-10RFCL-12	1.8	± 10	130	10	100	0.03	4000	
IM-10RFCL-12	2.2	± 10	130	10	92	0.04	3500	
IM-10RFCL-12	2.7	± 10	100	10	82	0.04	3500	
IM-10RFCL-12	3.3	± 10	100	7.9	72	0.04	3500	
IM-10RFCL-12	3.9	± 10	80	7.9	68	0.05	3100	
IM-10RFCL-12	4.7	± 10	75	7.9	64	0.05	3100	
IM-10RFCL-12	5.6	± 10	65	7.9	58	0.06	3000	
IM-10RFCL-12	6.8	± 10	65	7.9	52	0.06	3000	
IM-10RFCL-12	8.2	± 10	65	7.9	46	0.11	2400	
IM-10RFCL-12	10	± 10	75	5.0	40	0.15	1800	
IM-10RFCL-12	12	± 10	75	5.0	36	0.23	1600	
IM-10RFCL-12	15	± 10	75	5.0	32	0.3	1300	
IM-10RFCL-12	18	± 10	75	5.0	29	0.4	1150	
IM-10RFCL-12	22	± 10	75	2.5	26	0.5	1000	

IRON CORE

Note

(1) Model electricals and tolerances shown

STANDARD ELECTRICAL SPECIFICATIONS

MODEL [1]	IND. (µH)	TOL. (%)	Q MIN.	TEST FREQUENCY Q (MHz)	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	
IM-10RFCL-12	27	± 5	70	2.5	24	0.6	900	IRON CORE
IM-10RFCL-12	33	± 5	70	2.5	22	0.7	850	
IM-10RFCL-12	39	± 5	70	2.5	21	1.1	720	
IM-10RFCL-12	47	± 5	75	2.5	20	1.3	620	
IM-10RFCL-12	56	± 5	80	2.5	18	1.8	540	
IM-10RFCL-12	68	± 5	100	2.5	16	2.4	450	
IM-10RFCL-12	82	± 5	100	2.5	14	2.8	425	
IM-10RFCL-12	100	± 5	100	1.5	13	3.2	400	
IM-10RFCL-12	120	± 5	100	1.5	12	4.8	360	
IM-10RFCL-12	150	± 5	100	1.0	11	6.4	280	
IM-10RFCL-12	180	± 5	95	1.0	10	9.5	240	
IM-10RFCL-12	220	± 5	95	1.0	9	12	200	
IM-10RFCL-12	270	± 5	70	1.0	7	13	195	
IM-10RFCL-12	330	± 5	65	0.79	6	14	190	
IM-10RFCL-12	390	± 5	65	0.79	5	15.5	180	
IM-10RFCL-12	470	± 5	60	0.79	4	17	170	
IM-10RFCL-12	560	± 5	75	0.50	3	18.5	165	
IM-10RFCL-12	680	± 5	75	0.50	2.50	20	155	
IM-10RFCL-12	820	± 5	75	0.50	2.00	22	150	
IM-10RFCL-12	1000	± 5	75	0.50	1.90	24	145	
IM-10RFCL-12	1200	± 5	75	0.50	1.70	27	137	
IM-10RFCL-12	1500	± 5	75	0.40	1.50	29	130	
IM-10RFCL-12	1800	± 5	65	0.40	1.40	32	125	
IM-10RFCL-12	2200	± 5	65	0.25	1.20	35	120	
IM-10RFCL-12	2700	± 5	65	0.25	1.00	40	112	
IM-10RFCL-12	3300	± 5	65	0.25	0.95	45	105	
IM-10RFCL-12	3900	± 5	65	0.25	0.80	49	100	
IM-10RFCL-12	4700	± 5	65	0.25	0.75	53	95	
IM-10RFCL-12	5600	± 5	65	0.25	0.70	60	90	
IM-10RFCL-12	6800	± 5	65	0.25	0.60	67	85	
IM-10RFCL-12	8200	± 5	65	0.25	0.50	75	82	
IM-10RFCL-12	10 000	± 5	65	0.15	0.45	80	80	

Note
[1] Model electricals and tolerances shown

MARKING

- Color coded

ORDERING INFORMATION

IM-10RFCL-12	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	L	E	Z	1	R	0	K	1	2
MODEL								PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

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