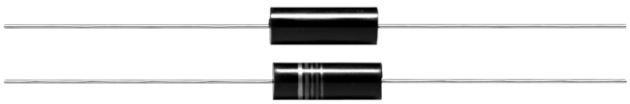
# Inductors

Commercial, Molded



## STANDARD ELECTRICAL SPECIFICATIONS

| MODEL | IND. (µH) | TOL. | Q MIN. | TEST FREQ. (MHz) | SRF MIN. (MHz) | DCR MAX. (Ohms) | 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 | |
| IM-10RFCL-12 | 27 | ± 5 % | 70 | 2.5 | 24 | 0.6 | 900 | |
| 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 | |

IRON CORE

* Model electricals and tolerances shown

## FEATURES

- Inductance range is 1 µH to 10 000 µH
- Proven reliability molded inductors

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 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 VRMS 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:** 1/2 watt dissipation for L Models

## MECHANICAL SPECIFICATIONS

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

## DENSITY SPECIFICATIONS

**Weight:** 4.1 grams maximum

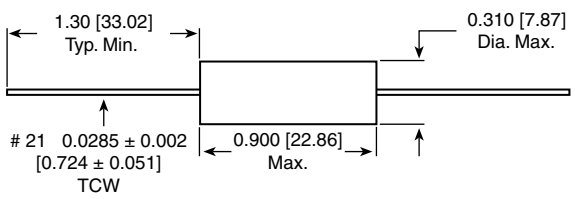
## ENVIRONMENTAL SPECIFICATIONS

**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 logarithmic swings, each of 20 minute duration repeated for each of three mutually perpendicular planes

## DIMENSIONS in inches [millimeters]



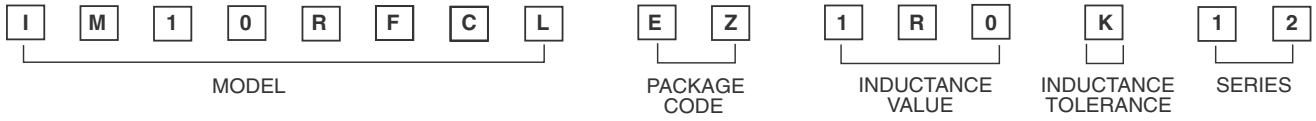

## MARKING

- 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



# Disclaimer

All product specifications and data are subject to change without notice.

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 herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.