



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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High Frequency, Surface Mount Inductors


RoHS
COMPLIANT

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | |
|------------------------------------|--------|------------------|------|--------|----------------|--------------|-----------------------|
| IND. (nH) | TOL. | TEST FREQ. (MHz) | | Q MIN. | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) |
| | | L | Q | | | | |
| 3.3 | 0.3 nH | 100 | 1000 | 50 | 6000 | 0.06 | 1000 |
| 6.8 | 5 % | 100 | 1000 | 50 | 5500 | 0.06 | 1000 |
| 8.2 | 5 % | 100 | 1000 | 50 | 5500 | 0.06 | 1000 |
| 10 | 5 % | 100 | 1000 | 50 | 4300 | 0.08 | 1000 |
| 12 | 5 % | 100 | 500 | 60 | 3600 | 0.08 | 1000 |
| 15 | 5 % | 100 | 500 | 60 | 2700 | 0.08 | 1000 |
| 18 | 5 % | 100 | 350 | 60 | 2700 | 0.10 | 1000 |
| 22 | 5 % | 100 | 350 | 60 | 2500 | 0.10 | 1000 |
| 27 | 5 % | 100 | 350 | 60 | 1800 | 0.10 | 1000 |
| 33 | 5 % | 100 | 350 | 60 | 1700 | 0.10 | 1000 |
| 39 | 5 % | 100 | 350 | 60 | 1500 | 0.10 | 1000 |
| 47 | 5 % | 100 | 350 | 60 | 1500 | 0.10 | 1000 |
| 56 | 5 % | 100 | 350 | 60 | 1350 | 0.12 | 1000 |
| 68 | 5 % | 100 | 350 | 60 | 1300 | 0.15 | 1000 |
| 82 | 5 % | 100 | 350 | 60 | 1100 | 0.18 | 1000 |
| 100 | 5 % | 100 | 350 | 60 | 1100 | 0.18 | 1000 |
| 120 | 5 % | 25 | 100 | 45 | 950 | 0.20 | 800 |
| 150 | 5 % | 25 | 100 | 45 | 880 | 0.22 | 800 |
| 180 | 5 % | 25 | 100 | 45 | 800 | 0.33 | 800 |
| 220 | 5 % | 25 | 100 | 45 | 730 | 0.45 | 800 |
| 270 | 5 % | 25 | 100 | 45 | 650 | 0.75 | 600 |
| 330 | 5 % | 25 | 100 | 45 | 570 | 0.90 | 500 |
| 390 | 5 % | 25 | 100 | 45 | 530 | 1.06 | 470 |
| 470 | 5 % | 25 | 100 | 45 | 480 | 1.17 | 420 |
| 560 | 5 % | 25 | 100 | 45 | 430 | 1.50 | 310 |
| 680 | 5 % | 25 | 100 | 45 | 380 | 2.06 | 230 |
| 750 | 5 % | 25 | 100 | 45 | 360 | 2.20 | 200 |
| 820 | 5 % | 25 | 100 | 45 | 350 | 2.30 | 180 |
| 910 | 5 % | 25 | 100 | 45 | 330 | 3.18 | 150 |
| 1000 | 5 % | 25 | 50 | 35 | 310 | 3.30 | 120 |
| 1200 | 5 % | 7.96 | 7.96 | 20 | 280 | 1.30 | 230 |
| 1500 | 5 % | 7.96 | 7.96 | 20 | 250 | 1.65 | 220 |
| 1800 | 5 % | 7.96 | 7.96 | 20 | 200 | 2.20 | 210 |
| 2200 | 5 % | 7.96 | 7.96 | 20 | 160 | 2.35 | 200 |
| 2700 | 5 % | 7.96 | 7.96 | 20 | 130 | 2.60 | 195 |
| 3300 | 5 % | 7.96 | 7.96 | 20 | 80 | 2.85 | 185 |
| 3900 | 5 % | 7.96 | 7.96 | 20 | 50 | 4.00 | 180 |
| 4700 | 5 % | 7.96 | 7.96 | 20 | 45 | 4.30 | 175 |
| 5600 | 5 % | 7.96 | 7.96 | 20 | 42 | 2.60 | 170 |
| 6800 | 5 % | 7.96 | 7.96 | 20 | 39 | 2.80 | 165 |
| 8200 | 5 % | 7.96 | 7.96 | 20 | 36 | 3.05 | 160 |
| 10 000 | 5 % | 2.52 | 2.52 | 15 | 33 | 3.50 | 150 |
| 12 000 | 5 % | 2.52 | 2.52 | 15 | 30 | 3.60 | 140 |
| 15 000 | 5 % | 2.52 | 2.52 | 15 | 26 | 4.00 | 130 |
| 18 000 | 5 % | 2.52 | 2.52 | 15 | 24 | 4.50 | 120 |
| 22 000 | 5 % | 2.52 | 2.52 | 15 | 22 | 5.00 | 110 |
| 27 000 | 5 % | 2.52 | 2.52 | 15 | 21 | 6.00 | 95 |
| 33 000 | 5 % | 2.52 | 2.52 | 15 | 20 | 6.50 | 85 |
| 39 000 | 5 % | 2.52 | 2.52 | 15 | 18 | 8.50 | 60 |
| 47 000 | 5 % | 2.52 | 2.52 | 15 | 17 | 14.00 | 45 |

FEATURES

- High self-resonant frequency values
- High Q values at higher frequencies
- Wirewound construction
- Compatible with vapor phase and infrared reflow soldering
- Tape and reel packaging for automatic handling, 2000/reel
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

ELECTRICAL SPECIFICATIONS

Inductance Range: 3.3 nH to 47 000 nH

Inductance and Tolerance: 0.3 nH for 3.3 nH ± 5 % for 6.8 nH to 47 000 nH

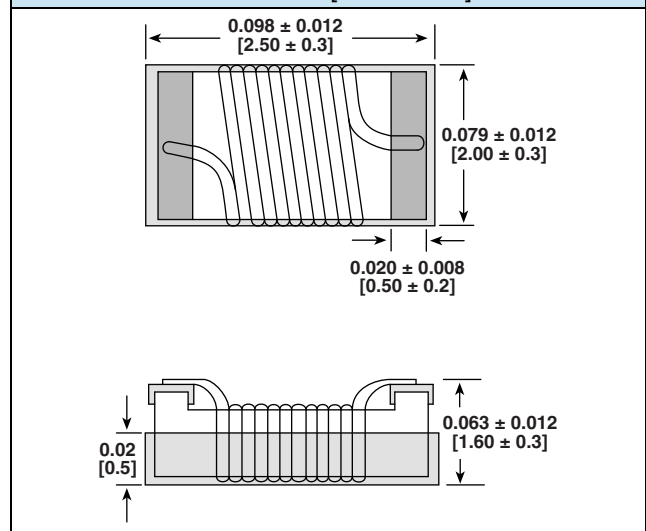
Operating Temperature: -40 °C to +125 °C

Core Material: Ceramic from 3.3 nH to 1000 nH
Ferrite from 1200 nH to 47 000 nH

TEST EQUIPMENT

- Inductance and Q measured on HP4286A
- SRF measured on HP8753D

DIMENSIONS in inches [millimeters]

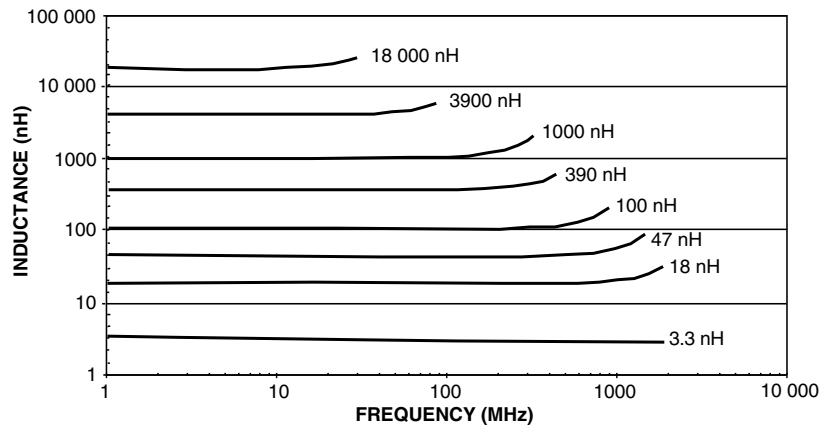
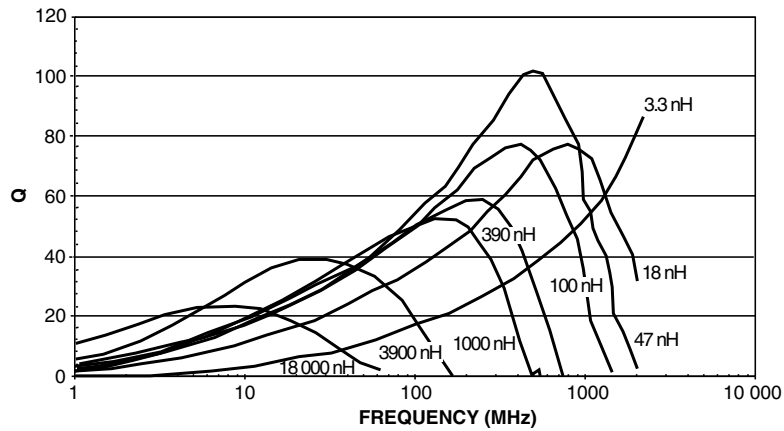
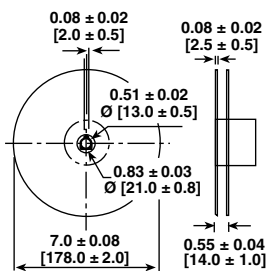
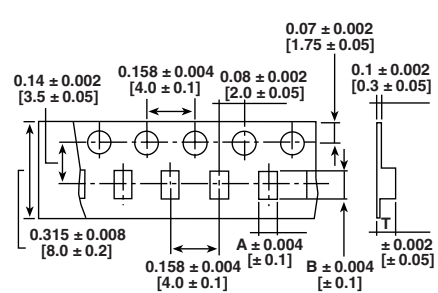
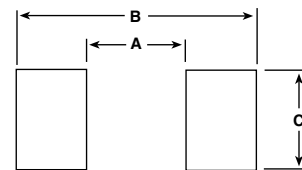


| DESCRIPTION | | | | |
|-------------|------------------|----------------------|--------------|--------------------------------|
| IMC-1008 | 10 nH | ± 5 % | ER | e4 ⁽¹⁾ |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

Note

⁽¹⁾ For parts within 3.3 nH to 910 nH please use e4 for JEDEC lead (Pb)-free standard. For parts within 1000 nH to 47 000 nH please use e3 for JEDEC lead (Pb)-free standard.

| GLOBAL PART NUMBER | | | | |
|--------------------|---|---|------------------|--------------|
| I | M | C | 1 | 0 |
| PRODUCT FAMILY | | | SIZE | PACKAGE CODE |
| | | | 1 | 0 |
| | | | INDUCTANCE VALUE | J |
| | | | | TOL. |

PERFORMANCE GRAPHS IMC-1008

TAPE AND REEL SPECIFICATIONS in inches [millimeters]
REEL DIMENSIONS

TAPE DIMENSIONS

RECOMMENDED PATTERN


| MODEL | UNITS PER REEL | MODEL | A | B | T | MODEL | A | B | C |
|----------|----------------|----------|-----------------|-----------------|-----------------|----------|-----------------|-----------------|-----------------|
| IMC-1008 | 2000 | IMC-1008 | 0.087 [2.20] | 0.110 [2.80] | 0.071 [1.80] | IMC-1008 | 0.047 [1.20] | 0.150 [3.80] | 0.100 [2.54] |



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