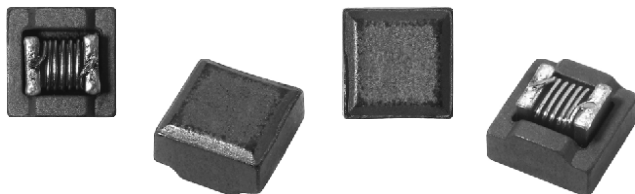


# Wirewound, Surface Mount, Shielded Inductor



## STANDARD ELECTRICAL SPECIFICATIONS

| IND. AT 100 kHz (μH) | TOL.   | Q MIN. AT 1 MHz | SRF MIN. (MHz) | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(1)</sup> |
|----------------------|--------|-----------------|----------------|--------------|--------------------------------------|
| 1.0                  | ± 20 % | 35              | 344            | 0.05         | 1000                                 |
| 1.5                  | ± 20 % | 35              | 260            | 0.06         | 800                                  |
| 1.8                  | ± 20 % | 35              | 225            | 0.09         | 680                                  |
| 2.7                  | ± 20 % | 38              | 185            | 0.14         | 650                                  |
| 3.9                  | ± 20 % | 38              | 175            | 0.26         | 650                                  |
| 4.7                  | ± 20 % | 38              | 160            | 0.35         | 500                                  |
| 5.6                  | ± 20 % | 38              | 150            | 0.40         | 450                                  |
| 6.8                  | ± 20 % | 38              | 120            | 0.60         | 400                                  |
| 10                   | ± 20 % | 38              | 100            | 0.95         | 250                                  |
| 15                   | ± 20 % | 38              | 35             | 1.15         | 220                                  |
| 22                   | ± 20 % | 40              | 26             | 1.40         | 180                                  |
| 33                   | ± 20 % | 45              | 20             | 1.60         | 150                                  |
| 39                   | ± 20 % | 45              | 14             | 1.85         | 130                                  |
| 47                   | ± 20 % | 45              | 14             | 2.50         | 110                                  |
| 68                   | ± 20 % | 45              | 12             | 3.80         | 100                                  |
| 82                   | ± 20 % | 45              | 9.0            | 4.20         | 100                                  |
| 100                  | ± 20 % | 45              | 7.0            | 5.80         | 80                                   |
| 120                  | ± 20 % | 45              | 6.0            | 6.20         | 60                                   |
| 150                  | ± 20 % | 40              | 5.6            | 7.50         | 50                                   |
| 220                  | ± 20 % | 40              | 4.0            | 10.0         | 50                                   |
| 330                  | ± 20 % | 40              | 3.8            | 11.5         | 50                                   |
| 470                  | ± 20 % | 35              | 2.0            | 16.5         | 50                                   |
| 560                  | ± 20 % | 35              | 2.0            | 18.0         | 30                                   |
| 680                  | ± 20 % | 30              | 1.8            | 24.0         | 30                                   |
| 820                  | ± 20 % | 30              | 1.5            | 26.0         | 30                                   |
| 1000                 | ± 20 % | 30              | 1.3            | 30.0         | 30                                   |

### Note

<sup>(1)</sup> For 15 °C rise

## RECOMMENDED PATTERN

| LENGTH (L)                    | WIDTH (W)                     | HEIGHT (H)                    | TERMINAL (S)                  |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 0.142 ± 0.008<br>[3.60 ± 0.2] | 0.142 ± 0.008<br>[3.60 ± 0.2] | 0.098 ± 0.008<br>[2.50 ± 0.2] | 0.020 ± 0.004<br>[0.50 ± 0.1] |

## FEATURES

- Excellent solderability and resistance to soldering heat
- Suitable for reflow soldering
- High reliability and easy surface mount assembly
- Wide range of inductance values available
- Tape and reel packaging for automatic handling, 750/reel, EIA-481
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

## ELECTRICAL SPECIFICATIONS

Inductance Range: 1 μH to 1000 μH

Operating Temperature: - 40 °C to + 85 °C

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

Material: Ferrite with magnetic shield

## TEST EQUIPMENT

- Inductance and Q is measured in HP-4286A RF LCR meter with HP-16193 fixture
- SRF is measured in HP-8753E RF network analyzer
- DCR is measured in HP-4338B milliohmeter

## DIMENSIONS in inches [millimeters]

| LENGTH (L)                    | WIDTH (W)                     | HEIGHT (H)                    | TERMINAL (S)                  |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 0.142 ± 0.008<br>[3.60 ± 0.2] | 0.142 ± 0.008<br>[3.60 ± 0.2] | 0.098 ± 0.008<br>[2.50 ± 0.2] | 0.020 ± 0.004<br>[0.50 ± 0.1] |
| A                             |                               | B                             | C                             |
| 0.080 ± 0.004<br>[2.00 ± 0.1] |                               | 0.063 ± 0.008<br>[1.60 ± 0.2] | 0.098 ± 0.004<br>[2.50 ± 0.1] |

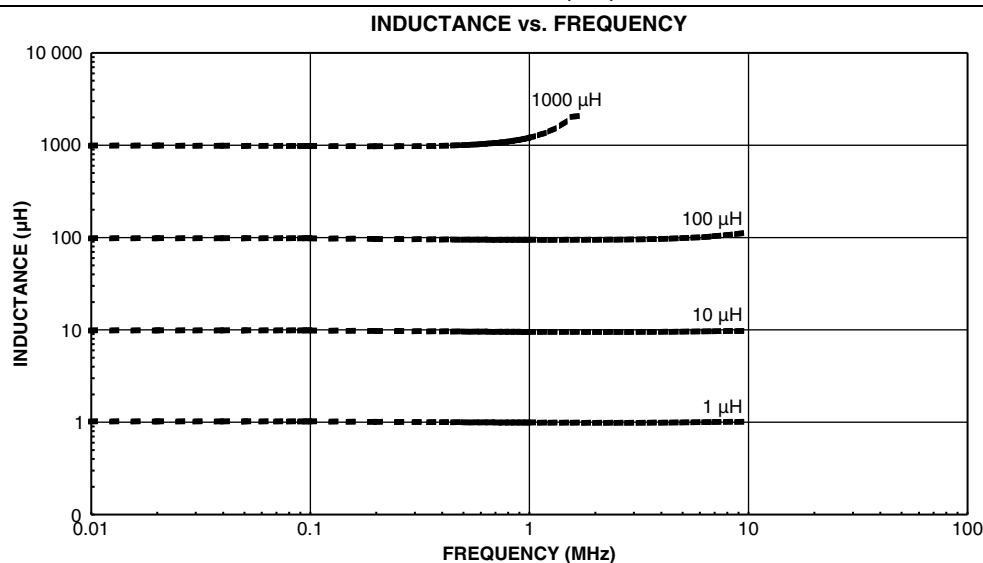
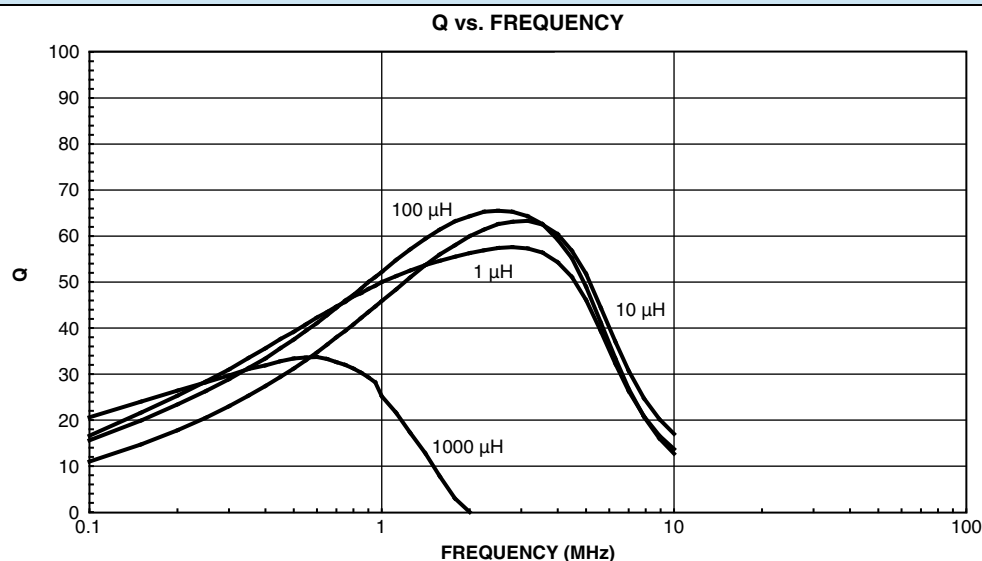
## DESCRIPTION

|          |                  |                      |              |                               |
|----------|------------------|----------------------|--------------|-------------------------------|
| ISC-1008 | 10 μH            | ± 20 %               | ER           | e3                            |
| MODEL    | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

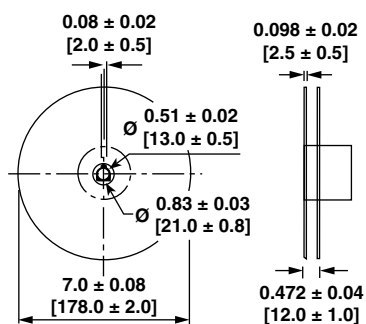
## GLOBAL PART NUMBER

|                |   |   |      |   |   |              |   |                  |   |   |      |   |
|----------------|---|---|------|---|---|--------------|---|------------------|---|---|------|---|
| I              | S | C | 1    | 0 | 0 | 8            | E | R                | 1 | 0 | 0    | M |
| PRODUCT FAMILY |   |   | SIZE |   |   | PACKAGE CODE |   | INDUCTANCE VALUE |   |   | TOL. |   |

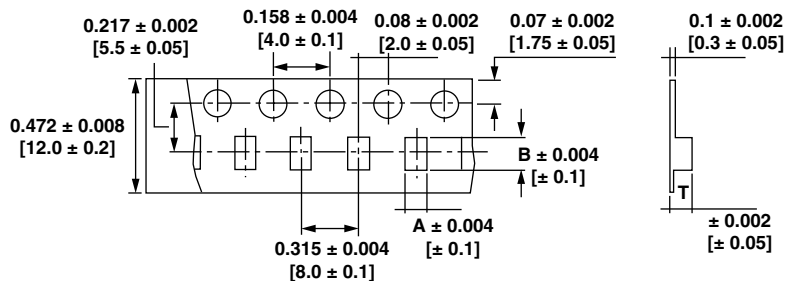
## PERFORMANCE GRAPHS ISC-1008

**TAPE AND REEL SPECIFICATIONS** in inches [millimeters]

## REEL DIMENSIONS



## TAPE DIMENSIONS



| MODEL    | UNITS PER REEL | MODEL    | A           | B           | T           |
|----------|----------------|----------|-------------|-------------|-------------|
| ISC-1008 | 750            | ISC-1008 | 0.150 [3.8] | 0.157 [4.0] | 0.098 [2.5] |



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