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Vishay Dale

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) ⁽¹⁾ | | | | |
| 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

(1) For 15 °C rise

| RECOMMENDED PATTERN | | | | | | | | |
|-------------------------------|-------------------------------|--|--|--|--|--|--|--|
| | | | | | | | | |
| | | | | | | | | |
| | | c | | | | | | |
| LENGTH (L) | WIDTH (W) | HEIGHT (H) | TERMINAL (S) | | | | | |
| 0.142 ± 0.008 [3.60 ± 0.2] | 0.142 ± 0.008 [3.60 ± 0.2] | $\begin{array}{c} 0.098 \pm 0.008 \\ [2.50 \pm 0.2] \end{array}$ | $\begin{array}{c} 0.020 \pm 0.004 \\ [0.50 \pm 0.1] \end{array}$ | | | | | |

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
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

ELECTRICAL SPECIFICATIONS

Inductance Range: 1 µH to 1000 µH

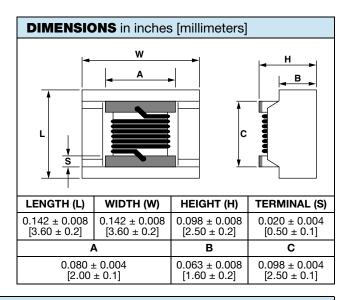
Operating Temperature: -40 °C to +85 °C

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 millohmeter



| DESCRIPTION | | | | | | | | | |
|---|------------------|----------------------|--------------|-------------------------------|------------------|--|--|--|--|
| ISC-1008 | 10 µH | ± 20 % | ER | e3 | | | | | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD | | | | | |
| GLOBAL PART NUMBER | | | | | | | | | |
| | S C 1 | 0 0 8 SIZE | E R | | M TOL. | | | | |
| Порос | | JIZL | CODE | VALUE | 10E. | | | | |
| evision: 26-Oct-2022 1 | | | | Docum | ent Number: 3417 | | | | |
| For technical questions, contact: <u>magnetics@vishay.com</u> | | | | | | | | | |



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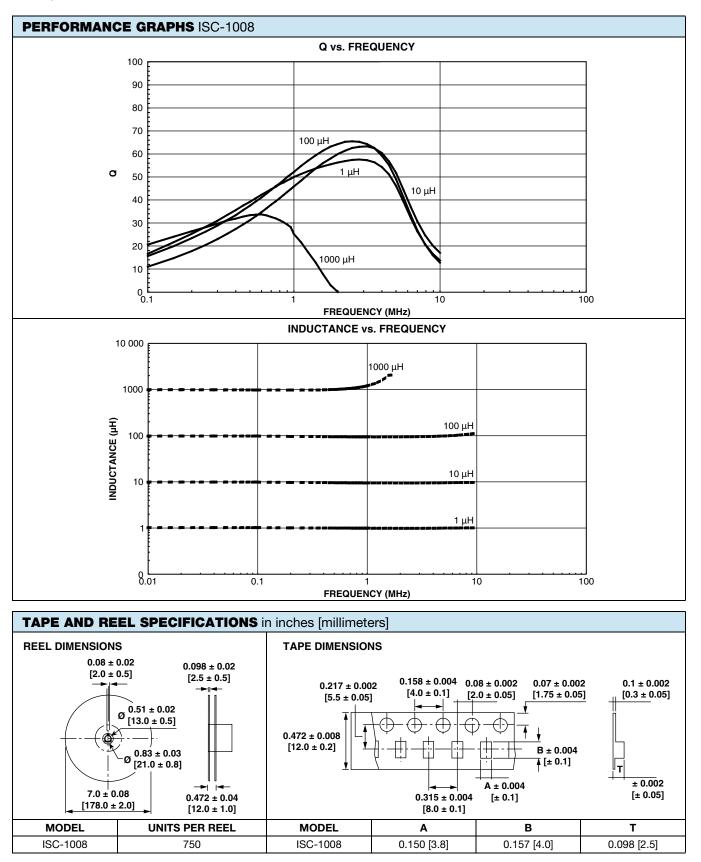
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ISC-1008

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