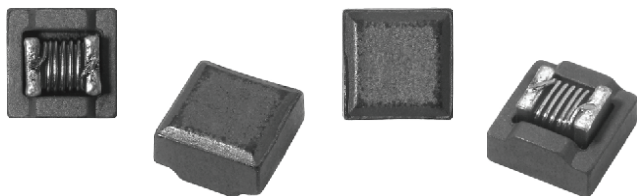




## Wirewound, Surface-Mount, Shielded Inductor



### 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 [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS COMPLIANT

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

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1 μH to 1000 μH

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

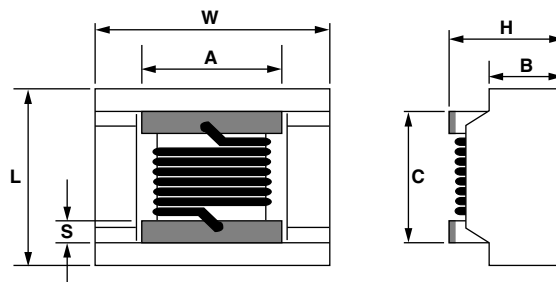
**Storage Temperature:** -40 °C to +125 °C

**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 milliohmmeter

### DIMENSIONS in inches [millimeters]



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

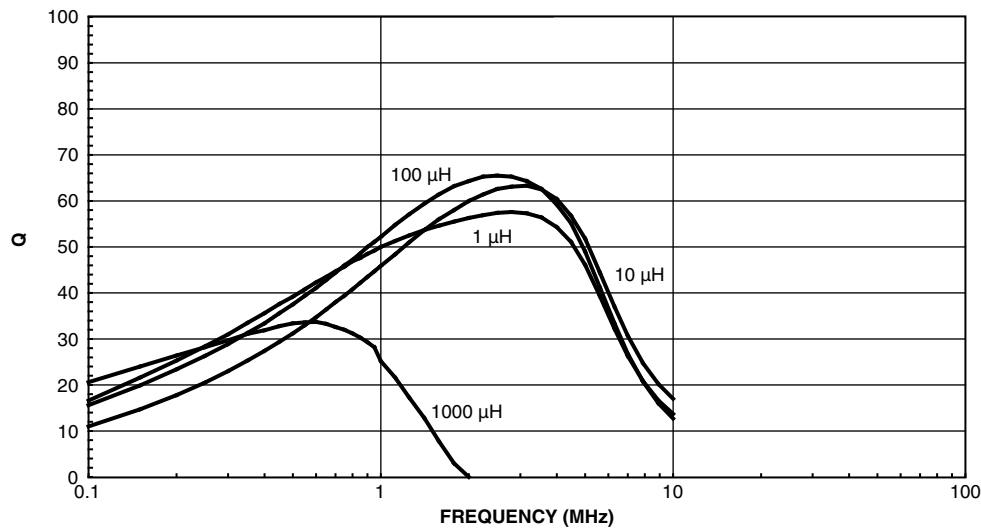
RECOMMENDED PATTERN			
LENGTH (L)	WIDTH (W)	HEIGHT (H)	TERMINAL (S)
0.142 ± 0.008 [3.60 ± 0.2]	0.142 ± 0.008 [3.60 ± 0.2]	0.098 ± 0.008 [2.50 ± 0.2]	0.020 ± 0.004 [0.50 ± 0.1]

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

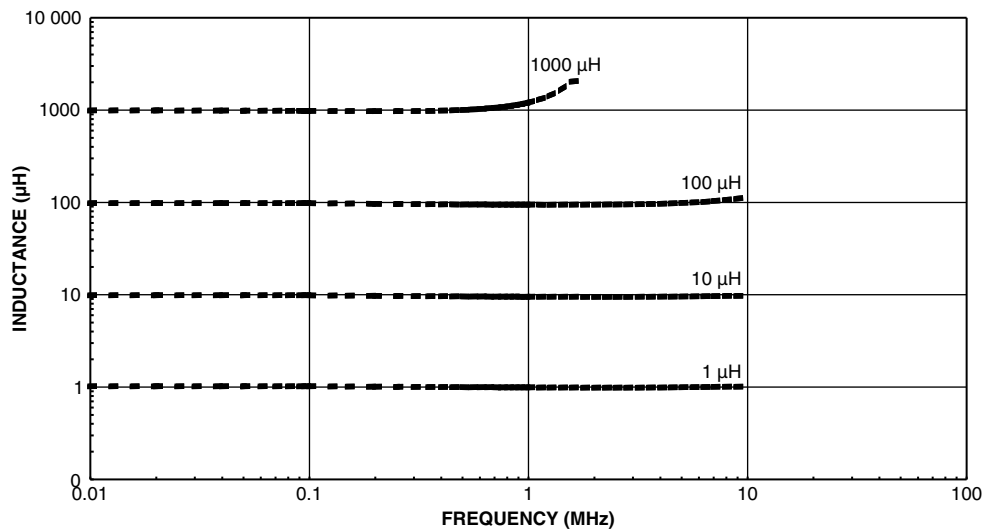
GLOBAL PART NUMBER				
I S C	1 0 0 8	E R	1 0 0	M
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	TOL.

**PERFORMANCE GRAPHS ISC-1008**

**Q vs. FREQUENCY**

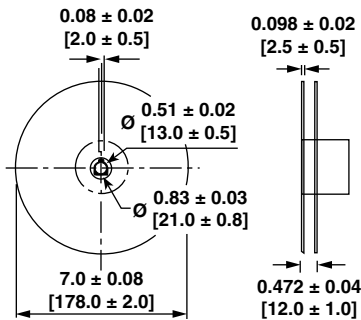


**INDUCTANCE vs. FREQUENCY**

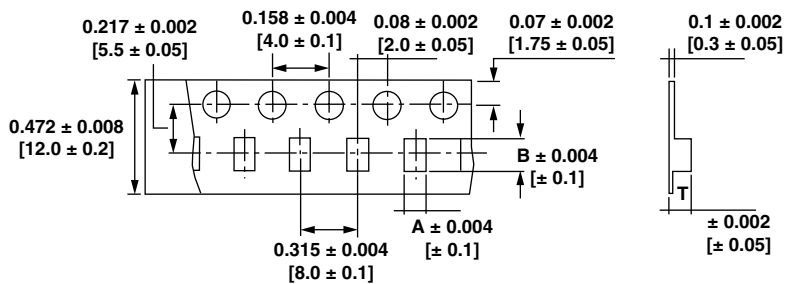


**TAPE AND REEL SPECIFICATIONS in inches [millimeters]**

**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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