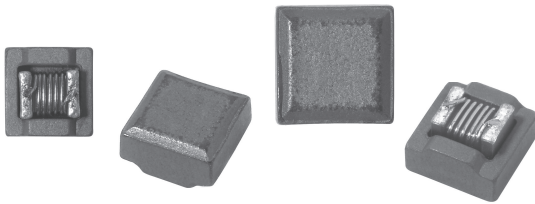


# Surface Mount Wirewound Shielded Inductor



## 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.
- 100% Lead (Pb)-free and RoHS compliant.

## ELECTRICAL SPECIFICATIONS

Inductance Range: 1 $\mu$ H to 1000 $\mu$ H.

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

Storage Temperature: - 40°C to 125°C.

Material: Ferrite with magnetic shield.

## TEST EQUIPMENT

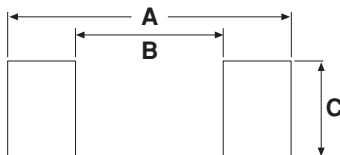
- Inductance and Q is measured in HP-4286A RF LCR meter with HP-16193 fixture.
- SRF is measured in HP-8753E RF network analyzer.
- DCR is measured in HP-4338B milliohmmeter.

## STANDARD ELECTRICAL SPECIFICATIONS

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

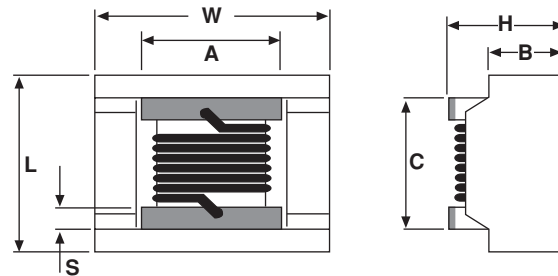
\*For 15°C rise

## RECOMMENDED PATTERN



A	B	C
0.128 [3.25]	0.049 [1.25]	0.098 [2.50]

## DIMENSIONS in inches [millimeters]



LENGTH (L)	WIDTH (W)	HEIGHT (H)	TERMINAL (S)
0.142 $\pm$ 0.008 [3.60 $\pm$ 0.2]	0.142 $\pm$ 0.008 [3.60 $\pm$ 0.2]	0.098 $\pm$ 0.008 [2.50 $\pm$ 0.2]	0.020 $\pm$ 0.004 [0.50 $\pm$ 0.1]
A	B	C	
0.080 $\pm$ 0.004 [2.00 $\pm$ 0.1]	0.063 $\pm$ 0.008 [1.60 $\pm$ 0.2]	0.098 $\pm$ 0.004 [2.50 $\pm$ 0.1]	

## DESCRIPTION

ISC-1008    10 $\mu$ H     $\pm 20\%$     ER    e3  
 MODEL    INDUCTANCE    INDUCTANCE    PACKAGE    JEDEC  
               VALUE            TOLERANCE    CODE        STANDARD

## GLOBAL PART NUMBER

**I S C**  
PRODUCT FAMILY

**1 0 0 8**  
SIZE

**E R**  
PACKAGE CODE

**1 0 0**  
INDUCTANCE VALUE

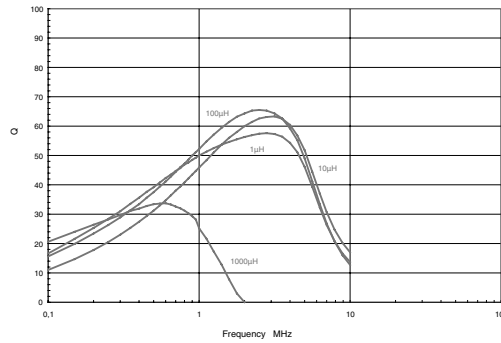
**M**  
TOL.

See the end of this data book for conversion tables

**PERFORMANCE GRAPHS**

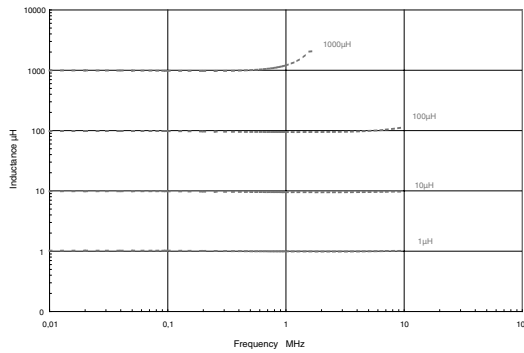
ISC-1008

**Q vs Frequency**



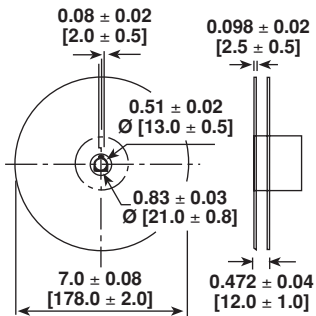
ISC-1008

**Inductance vs Frequency**

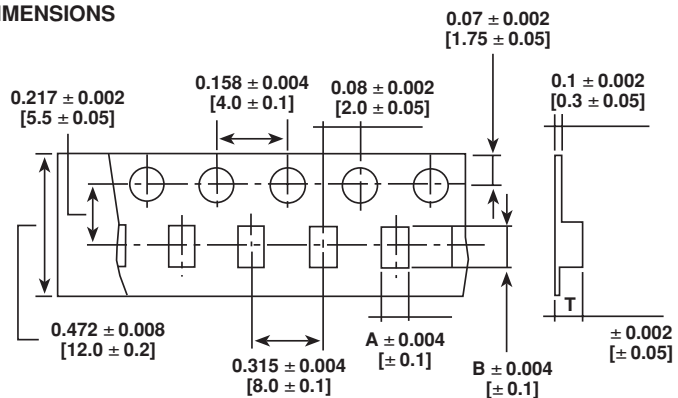


**TAPE AND REEL SPECIFICATIONS in inches [millimeters]**

**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]