

# High Frequency, Surface Mount Molded Inductors


**RoHS**  
COMPLIANT

## FEATURES

- Molded construction provides superior strength and moisture resistance
- Compatible with vapor phase infrared and wave soldering methods (100 % tin plating)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

## ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu$ H to 10 000  $\mu$ H

**Inductance and Tolerance:**  $\pm 10 \%$ ,  $\pm 5 \%$ 
**Operating Temperature:** -40 °C to +125 °C

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

## TEST EQUIPMENT

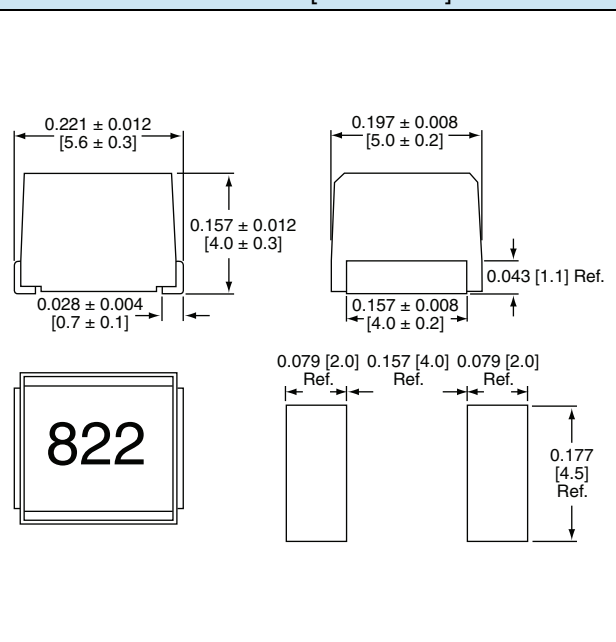
- Inductance and Q measured on HP4191
- SRF measured on HP3755
- DCR measured on HP34401

STANDARD ELECTRICAL SPECIFICATIONS						
IND. ( $\mu$ H)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA) <sup>(1)</sup>
		L & Q				
1.0	10 %	7.96	10	95	0.030	1800
1.2	10 %	7.96	10	70	0.035	1700
1.5	10 %	7.96	10	55	0.040	1600
1.8	10 %	7.96	10	47	0.050	1400
2.2	10 %	7.96	10	42	0.060	1300
2.7	10 %	7.96	10	37	0.070	1200
3.3	10 %	7.96	10	34	0.080	1120
3.9	10 %	7.96	10	32	0.090	1050
4.7	10 %	7.96	10	29	0.110	950
5.6	10 %	7.96	10	26	0.130	880
6.8	10 %	7.96	10	24	0.150	810
8.2	10 %	7.96	10	22	0.180	750
10	10 %	2.52	10	19	0.210	690
12	10 %	2.52	10	17	0.250	630
15	10 %	2.52	10	16	0.300	580
18	10 %	2.52	10	14	0.360	530
22	10 %	2.52	10	13	0.430	480
27	10 %	2.52	10	11.5	0.520	440
33	10 %	2.52	10	10.5	0.620	400
39	10 %	2.52	10	9.5	0.720	370
47	10 %	2.52	10	8.5	0.850	340
56	10 %	2.52	10	7.8	1.00	310
68	10 %	2.52	10	7	1.20	290
82	10 %	2.52	10	6.4	1.40	270
100	10 %	0.796	20	6	1.60	250
120	10 %	0.796	20	5.4	1.90	230
150	10 %	0.796	20	4.8	2.20	210
180	10 %	0.796	20	4.4	2.80	190
220	10 %	0.796	20	3.9	3.40	170
270	10 %	0.796	20	3.6	4.20	155
330	10 %	0.796	20	3.2	4.90	140
390	10 %	0.796	20	2.9	5.80	130
470	10 %	0.796	20	2.6	7.00	120
560	10 %	0.796	20	2.4	8.50	110
680	10 %	0.796	20	2.2	10.0	100
820	10 %	0.796	20	2	13.0	90
1000	10 %	0.252	20	1.8	15.0	85
1200	5 %	0.252	20	1.5	17.0	75
1500	5 %	0.252	20	1.4	20.0	70
1800	5 %	0.252	20	1.3	30.0	60
2200	5 %	0.252	20	1.2	35.0	55
2700	5 %	0.252	20	1.1	55.0	45
3300	5 %	0.252	20	1	60.0	40
3900	5 %	0.252	20	1	70.0	38
4700	5 %	0.252	20	0.9	78.0	36
5600	5 %	0.252	20	0.8	85.0	33
6800	5 %	0.252	20	0.7	110.0	30
8200	5 %	0.252	20	0.6	125.0	28
10 000	5 %	0.0796	15	0.5	150.0	25

### Note

- <sup>(1)</sup> Rated DC current based on the maximum temperature rise, not to exceed 40 °C at +85 °C ambient

## DIMENSIONS in inches [millimeters]



## DESCRIPTION

IMC-2220	22 $\mu$ H	$\pm 10 \%$	ER	E3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

## GLOBAL PART NUMBER

I	M	C	2	2	2	0	E	R	2	2	0	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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