

## Surface Mount, Molded Inductors



### STANDARD ELECTRICAL SPECIFICATIONS

| IND. (μH) | TOL.   | Q MIN. | TEST FREQ. L & Q (MHz) | SELF-RESONANT FREQ. MIN. (MHz) | DCR MAX. (Ohms) | RATED* DC CURRENT (mA) |
|-----------|--------|--------|------------------------|--------------------------------|-----------------|------------------------|
| 1.0       | ± 10 % | 10     | 7.96                   | 95.0                           | 0.030           | 1800                   |
| 1.2       | ± 10 % | 10     | 7.96                   | 70.0                           | 0.035           | 1700                   |
| 1.5       | ± 10 % | 10     | 7.96                   | 55.0                           | 0.040           | 1600                   |
| 1.8       | ± 10 % | 10     | 7.96                   | 47.0                           | 0.050           | 1400                   |
| 2.2       | ± 10 % | 10     | 7.96                   | 42.0                           | 0.060           | 1300                   |
| 2.7       | ± 10 % | 10     | 7.96                   | 37.0                           | 0.070           | 1200                   |
| 3.3       | ± 10 % | 10     | 7.96                   | 34.0                           | 0.080           | 1120                   |
| 3.9       | ± 10 % | 10     | 7.96                   | 32.0                           | 0.090           | 1050                   |
| 4.7       | ± 10 % | 10     | 7.96                   | 29.0                           | 0.110           | 950                    |
| 5.6       | ± 10 % | 10     | 7.96                   | 26.0                           | 0.130           | 880                    |
| 6.8       | ± 10 % | 10     | 7.96                   | 24.0                           | 0.150           | 810                    |
| 8.2       | ± 10 % | 10     | 7.96                   | 22.0                           | 0.180           | 750                    |
| 10        | ± 10 % | 10     | 2.52                   | 19.0                           | 0.210           | 690                    |
| 12        | ± 10 % | 10     | 2.52                   | 17.0                           | 0.250           | 630                    |
| 15        | ± 10 % | 10     | 2.52                   | 16.0                           | 0.300           | 580                    |
| 18        | ± 10 % | 10     | 2.52                   | 14.0                           | 0.360           | 530                    |
| 22        | ± 10 % | 10     | 2.52                   | 13.0                           | 0.430           | 480                    |
| 27        | ± 10 % | 10     | 2.52                   | 11.5                           | 0.520           | 440                    |
| 33        | ± 10 % | 10     | 2.52                   | 10.5                           | 0.620           | 400                    |
| 39        | ± 10 % | 10     | 2.52                   | 9.5                            | 0.720           | 370                    |
| 47        | ± 10 % | 10     | 2.52                   | 8.5                            | 0.850           | 340                    |
| 56        | ± 10 % | 10     | 2.52                   | 7.8                            | 1.00            | 310                    |
| 68        | ± 10 % | 10     | 2.52                   | 7.0                            | 1.20            | 290                    |
| 82        | ± 10 % | 10     | 2.52                   | 6.4                            | 1.40            | 270                    |
| 100       | ± 10 % | 20     | 0.796                  | 6.0                            | 1.60            | 250                    |
| 120       | ± 10 % | 20     | 0.796                  | 5.4                            | 1.90            | 230                    |
| 150       | ± 10 % | 20     | 0.796                  | 4.8                            | 2.20            | 210                    |
| 180       | ± 10 % | 20     | 0.796                  | 4.4                            | 2.80            | 190                    |
| 220       | ± 10 % | 20     | 0.796                  | 3.9                            | 3.40            | 170                    |
| 270       | ± 10 % | 20     | 0.796                  | 3.6                            | 4.20            | 155                    |
| 330       | ± 10 % | 20     | 0.796                  | 3.2                            | 4.90            | 140                    |
| 390       | ± 10 % | 20     | 0.796                  | 2.9                            | 5.80            | 130                    |
| 470       | ± 10 % | 20     | 0.796                  | 2.6                            | 7.00            | 120                    |
| 560       | ± 10 % | 20     | 0.796                  | 2.4                            | 8.50            | 110                    |
| 680       | ± 10 % | 20     | 0.796                  | 2.2                            | 10.0            | 100                    |
| 820       | ± 10 % | 20     | 0.796                  | 2.0                            | 13.0            | 90                     |
| 1000      | ± 10 % | 20     | 0.252                  | 1.8                            | 15.0            | 85                     |
| 1200      | ± 5 %  | 30     | 0.252                  | 1.5                            | 17.0            | 75                     |
| 1500      | ± 5 %  | 30     | 0.252                  | 1.4                            | 20.0            | 70                     |
| 1800      | ± 5 %  | 30     | 0.252                  | 1.3                            | 30.0            | 60                     |
| 2200      | ± 5 %  | 30     | 0.252                  | 1.2                            | 35.0            | 55                     |
| 2700      | ± 5 %  | 30     | 0.252                  | 1.1                            | 55.0            | 45                     |
| 3300      | ± 5 %  | 30     | 0.252                  | 1.0                            | 60.0            | 40                     |
| 3900      | ± 5 %  | 30     | 0.252                  | 1.0                            | 70.0            | 38                     |
| 4700      | ± 5 %  | 30     | 0.252                  | 0.9                            | 78.0            | 36                     |
| 5600      | ± 5 %  | 30     | 0.252                  | 0.8                            | 85.0            | 33                     |
| 6800      | ± 5 %  | 30     | 0.252                  | 0.7                            | 110.0           | 30                     |
| 8200      | ± 5 %  | 30     | 0.252                  | 0.6                            | 125.0           | 28                     |
| 10000     | ± 5 %  | 20     | 0.0796                 | 0.5                            | 150.0           | 25                     |

\*Rated DC Current based on the maximum temperature rise, not to exceed 40 °C at + 85 °C ambient.

### FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 1000/reel, EIA-481
- Compatible with vapor phase infrared and wave soldering methods, (100 % tin plating)
- Lead (Pb)-free terminations and RoHS compliant



**RoHS**  
COMPLIANT

### ELECTRICAL SPECIFICATIONS

**Inductance:** 1.0 uH to 10 000 uH

**Inductance Tolerance:** ± 10 %, ± 5 %

**Operating Temperature:** - 25 °C to 85 °C

**Storage Temperature:** - 40 °C to + 100 °C

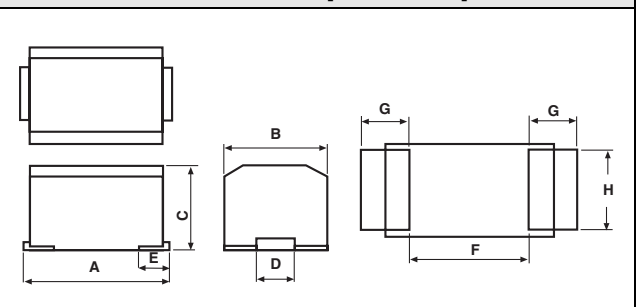
### TEST EQUIPMENT

L & Q: H/P 4191

SRF: H/P 3577

DCR: H/P 34401

### DIMENSIONS in inches [millimeters]



| A                            | B                            | C                            | D                            |
|------------------------------|------------------------------|------------------------------|------------------------------|
| 0.221 ± 0.012<br>[5.6 ± 0.3] | 0.197 ± 0.012<br>[5.0 ± 0.3] | 0.197 ± 0.012<br>[5.0 ± 0.3] | 0.083 ± 0.001<br>[2.1 ± 0.2] |
| E                            | F                            | G                            | H                            |
| 0.051 ± 0.001<br>[1.3 ± 0.2] | 0.1182<br>[3.0]              | 0.1024<br>[2.6]              | 0.1773<br>[4.5]              |

### EIA PART MARKING

- Inductance Value

### DESCRIPTION

IMC-2220

MODEL

22 μH

INDUCTANCE  
VALUE

± 10 %

INDUCTANCE  
TOLERANCE

ER

PACKAGE  
CODE

e3

JEDEC LEAD (Pb)-FREE  
STANDARD

### GLOBAL PART NUMBER

**I M C**  
MODEL

**2 2 2 0**  
SIZE

**E R**  
PACKAGE  
CODE

**2 2 0**  
INDUCTANCE  
VALUE

**K**  
TOL



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