

## Wirewound, Surface Mount, Molded Inductors



### STANDARD ELECTRICAL SPECIFICATIONS

| IND.<br>( $\mu$ H) | TOL.       | TEST<br>FREQ.<br>(MHz) | Q<br>MIN. | SRF<br>MIN.<br>(MHz) | DCR<br>MAX.<br>( $\Omega$ ) | RATED DC<br>CURRENT<br>(mA) <sup>(1)</sup> |
|--------------------|------------|------------------------|-----------|----------------------|-----------------------------|--------------------------------------------|
|                    |            | L & Q                  |           |                      |                             |                                            |
| 1.0                | $\pm 10\%$ | 7.96                   | 10        | 200                  | 0.11                        | 1050                                       |
| 1.2                | $\pm 10\%$ | 7.96                   | 10        | 160                  | 0.12                        | 1000                                       |
| 1.5                | $\pm 10\%$ | 7.96                   | 10        | 130                  | 0.15                        | 950                                        |
| 1.8                | $\pm 10\%$ | 7.96                   | 10        | 100                  | 0.16                        | 900                                        |
| 2.2                | $\pm 10\%$ | 7.96                   | 10        | 60.0                 | 0.18                        | 850                                        |
| 2.7                | $\pm 10\%$ | 7.96                   | 10        | 60.0                 | 0.20                        | 800                                        |
| 3.3                | $\pm 10\%$ | 7.96                   | 10        | 45.0                 | 0.22                        | 750                                        |
| 3.9                | $\pm 10\%$ | 7.90                   | 10        | 40.0                 | 0.24                        | 700                                        |
| 4.7                | $\pm 10\%$ | 7.96                   | 10        | 35.0                 | 0.3                         | 650                                        |
| 5.6                | $\pm 10\%$ | 7.96                   | 10        | 30.0                 | 0.3                         | 650                                        |
| 6.8                | $\pm 10\%$ | 7.96                   | 10        | 28.0                 | 0.4                         | 600                                        |
| 8.2                | $\pm 10\%$ | 7.96                   | 10        | 25.0                 | 0.4                         | 600                                        |
| 10                 | $\pm 10\%$ | 2.52                   | 10        | 22.0                 | 0.5                         | 550                                        |
| 12                 | $\pm 10\%$ | 2.52                   | 10        | 21.0                 | 0.6                         | 500                                        |
| 15                 | $\pm 10\%$ | 2.52                   | 10        | 20.0                 | 0.7                         | 450                                        |
| 18                 | $\pm 10\%$ | 2.52                   | 10        | 19.0                 | 0.8                         | 400                                        |
| 22                 | $\pm 10\%$ | 2.52                   | 10        | 18.0                 | 0.9                         | 370                                        |
| 27                 | $\pm 10\%$ | 2.52                   | 10        | 16.0                 | 1.2                         | 330                                        |
| 33                 | $\pm 10\%$ | 2.52                   | 10        | 14.0                 | 1.4                         | 300                                        |
| 39                 | $\pm 10\%$ | 2.52                   | 10        | 12.0                 | 1.6                         | 280                                        |
| 47                 | $\pm 10\%$ | 2.52                   | 10        | 11.5                 | 1.9                         | 260                                        |
| 56                 | $\pm 10\%$ | 2.52                   | 10        | 11.0                 | 2.2                         | 240                                        |
| 68                 | $\pm 10\%$ | 2.52                   | 10        | 10.0                 | 2.6                         | 220                                        |
| 82                 | $\pm 10\%$ | 2.52                   | 10        | 9.0                  | 3.5                         | 200                                        |
| 100                | $\pm 10\%$ | 0.796                  | 20        | 8.0                  | 4.0                         | 180                                        |
| 120                | $\pm 10\%$ | 0.796                  | 20        | 6.5                  | 4.5                         | 160                                        |
| 150                | $\pm 10\%$ | 0.796                  | 20        | 7.0                  | 6.5                         | 140                                        |
| 180                | $\pm 10\%$ | 0.796                  | 20        | 5.5                  | 7.5                         | 120                                        |
| 220                | $\pm 10\%$ | 0.796                  | 20        | 5.5                  | 9                           | 120                                        |
| 270                | $\pm 10\%$ | 0.796                  | 20        | 5.0                  | 11                          | 100                                        |
| 330                | $\pm 10\%$ | 0.796                  | 20        | 4.0                  | 13                          | 90                                         |

#### Note

<sup>(1)</sup> 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, 500/reel, EIA-481
- Compatible with vapor phase, infrared and wave soldering methods
- Compliant to RoHS Directive 2002/95/EC



**RoHS**  
COMPLIANT

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1  $\mu$ H to 330  $\mu$ H

**Inductance Tolerance:**  $\pm 10\%$

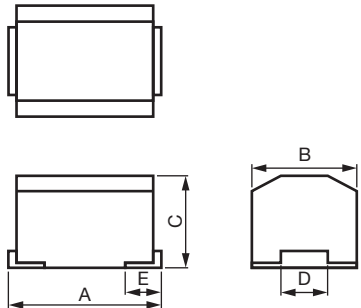
**Operating Temperature:** - 40 °C to + 85 °C

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

### TEST EQUIPMENT

- L & Q: H/P 4285A
- SRF: H/P 4286A
- DCR: H/P 34401

### DIMENSIONS in inches [millimeters]

|  |                                      |                                      |
|-------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|
| A                                                                                   | B                                    | C                                    |
| 0.177 $\pm$ 0.012<br>[4.5 $\pm$ 0.3]                                                | 0.126 $\pm$ 0.012<br>[3.2 $\pm$ 0.3] | 0.126 $\pm$ 0.012<br>[3.2 $\pm$ 0.3] |
| D                                                                                   | E                                    |                                      |
| 0.055 $\pm$ 0.016<br>[1.4 $\pm$ 0.4]                                                | 0.035 $\pm$ 0.008<br>[0.9 $\pm$ 0.2] |                                      |

### PART MARKING

- Inductance value

### DESCRIPTION

|                  |                             |                              |              |                               |
|------------------|-----------------------------|------------------------------|--------------|-------------------------------|
| <b>IMCH-1812</b> | <b>22 <math>\mu</math>H</b> | <b><math>\pm 10\%</math></b> | <b>ER</b>    | <b>e3</b>                     |
| MODEL            | INDUCTANCE VALUE            | INDUCTANCE TOLERANCE         | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

### GLOBAL PART NUMBER

|                |          |          |          |          |          |          |          |              |          |                  |          |          |          |
|----------------|----------|----------|----------|----------|----------|----------|----------|--------------|----------|------------------|----------|----------|----------|
| <b>I</b>       | <b>M</b> | <b>C</b> | <b>H</b> | <b>1</b> | <b>8</b> | <b>1</b> | <b>2</b> | <b>E</b>     | <b>R</b> | <b>2</b>         | <b>2</b> | <b>0</b> | <b>K</b> |
| PRODUCT FAMILY |          |          |          | SIZE     |          |          |          | PACKAGE CODE |          | INDUCTANCE VALUE |          |          | TOL.     |



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