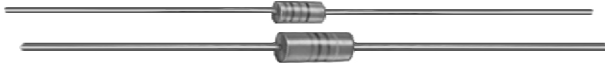


## Inductors, Commercial, Molded, Axial Leaded



### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 1\%$ ,  $\pm 3\%$ ,  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$ , other tolerances available on request

**Insulation Resistance:** 1000 M $\Omega$  minimum per MIL-STD-202, method 302, test condition B

**Dielectric Strength:** Per MIL-STD-202, method 301: 1000 V<sub>AC</sub> for IM-2, IM-4, IM-6, IM-8, IM-9 and IM-10 200 V<sub>AC</sub> for IM-1

### TEST EQUIPMENT (1)

- H/P 4342A Q-meter
- Measurements corporation megacycle meter, model 59
- Wheatstone bridge

#### Note

(1) Test procedure per MIL-PRF-15305

### MATERIAL SPECIFICATIONS

**Encapsulant:** Epoxy

**Standard Terminals:** IM-1 and IM-2: 24 AWG; IM-4, IM-6 and IM-9: 22 AWG; IM-8: 21 AWG; IM-10: 20 AWG, tinned copper

| ENVIRONMENTAL PERFORMANCE    |            |                        |
|------------------------------|------------|------------------------|
| TEST                         | CONDITIONS | SPECIFICATIONS         |
| Barometric Pressure          | C          | MIL-STD-202, meth. 105 |
| Thermal Shock                | A-1        | MIL-STD-202, meth. 107 |
| Flammability                 | -          | MIL-STD-202, meth. 111 |
| Overload                     | -          | MIL-PRF-15305          |
| Low Temperature Storage      | -          | MIL-PRF-15305          |
| Resistance to Soldering Heat | A          | MIL-STD-202, meth. 210 |
| Resistance to Solvents       | -          | MIL-STD-202, meth. 215 |

### FEATURES

- Wide inductance range in small package
- Flame retardant coating
- Precision performance, excellent reliability, study construction
- Epoxy molded construction provides superior moisture protection
- Compliant to RoHS directive 2002/95/EC



**RoHS**  
COMPLIANT

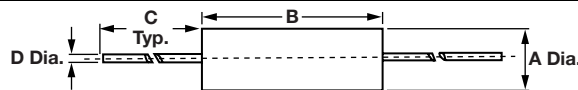
### MECHANICAL SPECIFICATIONS

**Terminal Strength:** Per MIL-STD-202, method 211, test condition A: For IM-1, 3 lb pull; for IM-2, IM-4, IM-6, IM-8, IM-9 and IM-10, 5 lb pull and twist

**Weight:** IM-1 = 0.25 g max., IM-2 = 0.30 g max., IM-4 = 0.65 g max., IM-6 = 0.95 g max., IM-8 = 1.5 g max., IM-9 = 2.0 g max., IM-10 = 2.5 g max.

| INDUCTANCE RANGE AND MILITARY STANDARD |                             |        |
|--|-----------------------------|--------|
| MODEL                                  | INDUCTANCE RANGE ( $\mu$ H) |        |
|  | MIN.                        | MAX.   |
| IM-1                                   | 0.10                        | 100    |
| IM-2                                   | 0.022                       | 0.082  |
|  | 0.10                        | 1      |
|  | 1.2                         | 27     |
| IM-4                                   | 33                          | 1000   |
|  | 0.15                        | 4.7    |
|  | 5.6                         | 33     |
|  | 36                          | 240    |
| IM-6                                   | 270                         | 1800   |
|  | 0.10                        | 2.7    |
|  | 3.3                         | 27     |
|  | 33                          | 220    |
| IM-8                                   | 270                         | 1000   |
|  | 1100                        | 3600   |
| IM-9                                   | 68                          | 150    |
| IM-10                                  | 3900                        | 10 000 |

### DIMENSIONS in inches [millimeters]



| MODEL |      | A (DIA.)     | B             | C (TYP.)     | D (DIA.)       |
|-------|------|--------------|---------------|--------------|----------------|
| IM-1  | Max. | 0.086 [2.18] | 0.210 [5.33]  | 1.62 [41.15] | 0.0215 [0.546] |
|       | Min. | 0.070 [1.78] | 0.190 [4.83]  | 1.38 [35.05] | 0.0185 [0.470] |
| IM-2  | Max. | 0.105 [2.67] | 0.260 [6.60]  | 1.63 [41.40] | 0.0215 [0.546] |
|       | Min. | 0.085 [2.16] | 0.240 [6.10]  | 1.25 [31.75] | 0.0185 [0.470] |
| IM-4  | Max. | 0.165 [4.19] | 0.385 [9.78]  | 1.63 [41.40] | 0.027 [0.686]  |
|       | Min. | 0.145 [3.68] | 0.365 [9.27]  | 1.25 [31.75] | 0.023 [0.584]  |
| IM-6  | Max. | 0.200 [5.08] | 0.450 [11.43] | 1.63 [41.40] | 0.027 [0.686]  |
|       | Min. | 0.180 [4.57] | 0.430 [10.92] | 1.25 [31.75] | 0.023 [0.584]  |
| IM-8  | Max. | 0.225 [5.72] | 0.570 [14.48] | 1.63 [41.40] | 0.030 [0.762]  |
|       | Min. | 0.205 [5.21] | 0.550 [13.97] | 1.25 [31.75] | 0.026 [0.660]  |
| IM-9  | Max. | 0.260 [6.60] | 0.570 [14.48] | 1.63 [41.40] | 0.027 [0.686]  |
|       | Min. | 0.240 [6.10] | 0.550 [13.97] | 1.25 [31.75] | 0.023 [0.584]  |
| IM-10 | Max. | 0.250 [6.35] | 0.750 [19.05] | 1.63 [41.40] | 0.034 [0.864]  |
|       | Min. | 0.230 [5.84] | 0.730 [18.54] | 1.25 [31.75] | 0.030 [0.762]  |

| STANDARD ELECTRICAL SPECIFICATIONS |           |          |        |                        |                               |              |                                      |               |               |
|------------------------------------|-----------|----------|--------|------------------------|-------------------------------|--------------|--------------------------------------|---------------|---------------|
| MODEL                              | IND. (μH) | TOL. (%) | Q MIN. | TEST FREQUENCY Q (MHz) | SRF MIN. (MHz) <sup>(1)</sup> | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(2)</sup> |               |               |
| IM-1                               | 0.10      | ± 10     | 35     | 25.0                   | 680.0                         | 0.13         | 895                                  | PHENOLIC CORE |               |
| IM-1                               | 0.12      | ± 10     | 35     | 25.0                   | 650.0                         | 0.15         | 835                                  |               |               |
| IM-1                               | 0.15      | ± 10     | 35     | 25.0                   | 560.0                         | 0.18         | 760                                  |               |               |
| IM-1                               | 0.18      | ± 10     | 35     | 25.0                   | 540.0                         | 0.21         | 705                                  |               |               |
| IM-1                               | 0.22      | ± 10     | 30     | 25.0                   | 500.0                         | 0.25         | 645                                  |               |               |
| IM-1                               | 0.27      | ± 10     | 30     | 25.0                   | 440.0                         | 0.38         | 525                                  |               |               |
| IM-1                               | 0.33      | ± 10     | 25     | 25.0                   | 410.0                         | 0.49         | 460                                  |               |               |
| IM-1                               | 0.39      | ± 10     | 25     | 25.0                   | 380.0                         | 0.59         | 420                                  |               |               |
| IM-1                               | 0.47      | ± 10     | 25     | 25.0                   | 340.0                         | 0.62         | 410                                  |               |               |
| IM-1                               | 0.56      | ± 10     | 40     | 25.0                   | 250.0                         | 0.18         | 510                                  | IRON CORE     |               |
| IM-1                               | 0.68      | ± 10     | 40     | 25.0                   | 215.0                         | 0.20         | 485                                  |               |               |
| IM-1                               | 0.82      | ± 10     | 40     | 25.0                   | 200.0                         | 0.22         | 465                                  |               |               |
| IM-1                               | 1.0       | ± 10     | 40     | 25.0                   | 190.0                         | 0.25         | 435                                  |               |               |
| IM-1                               | 1.2       | ± 10     | 35     | 7.9                    | 170.0                         | 0.28         | 410                                  |               |               |
| IM-1                               | 1.5       | ± 10     | 40     | 7.9                    | 150.0                         | 0.49         | 310                                  |               |               |
| IM-1                               | 1.8       | ± 10     | 40     | 7.9                    | 135.0                         | 0.56         | 290                                  |               |               |
| IM-1                               | 2.2       | ± 10     | 45     | 7.9                    | 130.0                         | 0.72         | 257                                  |               |               |
| IM-1                               | 2.7       | ± 10     | 45     | 7.9                    | 110.0                         | 0.85         | 236                                  |               |               |
| IM-1                               | 3.3       | ± 10     | 45     | 7.9                    | 100.0                         | 1.2          | 198                                  |               |               |
| IM-1                               | 3.9       | ± 10     | 50     | 7.9                    | 95.0                          | 1.5          | 178                                  |               |               |
| IM-1                               | 4.7       | ± 10     | 55     | 7.9                    | 88.0                          | 2.1          | 150                                  |               |               |
| IM-1                               | 5.6       | ± 10     | 55     | 7.9                    | 78.0                          | 2.8          | 130                                  |               |               |
| IM-1                               | 6.8       | ± 10     | 55     | 7.9                    | 69.0                          | 3.2          | 122                                  |               |               |
| IM-1                               | 8.2       | ± 10     | 45     | 7.9                    | 52.0                          | 4.4          | 104                                  |               |               |
| IM-1                               | 10.0      | ± 10     | 45     | 7.9                    | 47.0                          | 5.2          | 95                                   |               |               |
| IM-1                               | 12.0      | ± 10     | 40     | 2.5                    | 31.0                          | 3.0          | 126                                  |               |               |
| IM-1                               | 15.0      | ± 10     | 40     | 2.5                    | 26.0                          | 3.4          | 118                                  |               |               |
| IM-1                               | 18.0      | ± 10     | 40     | 2.5                    | 23.0                          | 3.8          | 112                                  |               |               |
| IM-1                               | 22.0      | ± 10     | 45     | 2.5                    | 20.0                          | 4.3          | 105                                  |               |               |
| IM-1                               | 27.0      | ± 10     | 45     | 2.5                    | 17.0                          | 4.7          | 100                                  |               |               |
| IM-1                               | 33.0      | ± 10     | 45     | 2.5                    | 15.0                          | 5.2          | 95                                   |               |               |
| IM-1                               | 39.0      | ± 10     | 45     | 2.5                    | 13.5                          | 6.8          | 83.5                                 |               |               |
| IM-1                               | 47.0      | ± 10     | 45     | 2.5                    | 12.5                          | 8.2          | 76                                   |               |               |
| IM-1                               | 56.0      | ± 10     | 45     | 2.5                    | 11.5                          | 10.0         | 69                                   |               |               |
| IM-1                               | 68.0      | ± 10     | 45     | 2.5                    | 10.5                          | 11.5         | 64                                   |               |               |
| IM-1                               | 82.0      | ± 10     | 45     | 2.5                    | 10.0                          | 16.0         | 54.5                                 |               |               |
| IM-1                               | 100.0     | ± 10     | 45     | 2.5                    | 9.5                           | 17.5         | 52                                   |               |               |
| IM-2                               | 0.022     | ± 10     | 50     | 50.0                   | 900.0                         | 0.025        | 2400                                 |               | PHENOLIC CORE |
| IM-2                               | 0.027     | ± 20     | 40     | 25.0                   | 875.0                         | 0.03         | 2200                                 |               |               |
| IM-2                               | 0.033     | ± 10     | 40     | 25.0                   | 850.0                         | 0.035        | 2000                                 |               |               |
| IM-2                               | 0.039     | ± 10     | 40     | 25.0                   | 825.0                         | 0.04         | 1900                                 |               |               |
| IM-2                               | 0.047     | ± 10     | 40     | 25.0                   | 800.0                         | 0.045        | 1800                                 |               |               |
| IM-2                               | 0.056     | ± 10     | 40     | 25.0                   | 775.0                         | 0.05         | 1700                                 |               |               |
| IM-2                               | 0.068     | ± 10     | 40     | 25.0                   | 750.0                         | 0.06         | 1500                                 |               |               |
| IM-2                               | 0.082     | ± 10     | 40     | 25.0                   | 725.0                         | 0.07         | 1400                                 |               |               |
| IM-2                               | 0.10      | ± 10     | 40     | 25.0                   | 680.0                         | 0.08         | 1350                                 |               |               |
| IM-2                               | 0.12      | ± 10     | 40     | 25.0                   | 640.0                         | 0.09         | 1270                                 |               |               |
| IM-2                               | 0.15      | ± 10     | 38     | 25.0                   | 600.0                         | 0.10         | 1200                                 |               |               |
| IM-2                               | 0.18      | ± 10     | 35     | 25.0                   | 550.0                         | 0.12         | 1105                                 |               |               |
| IM-2                               | 0.22      | ± 10     | 33     | 25.0                   | 510.0                         | 0.14         | 1025                                 |               |               |
| IM-2                               | 0.27      | ± 10     | 33     | 25.0                   | 430.0                         | 0.16         | 960                                  |               |               |
| IM-2                               | 0.33      | ± 10     | 30     | 25.0                   | 410.0                         | 0.22         | 815                                  |               |               |
| IM-2                               | 0.39      | ± 10     | 30     | 25.0                   | 365.0                         | 0.30         | 700                                  |               |               |
| IM-2                               | 0.47      | ± 10     | 30     | 25.0                   | 330.0                         | 0.35         | 650                                  |               |               |
| IM-2                               | 0.56      | ± 10     | 30     | 25.0                   | 300.0                         | 0.50         | 545                                  |               |               |
| IM-2                               | 0.68      | ± 10     | 28     | 25.0                   | 275.0                         | 0.60         | 495                                  |               |               |
| IM-2                               | 0.82      | ± 10     | 28     | 25.0                   | 250.0                         | 0.85         | 415                                  |               |               |
| IM-2                               | 1.0       | ± 10     | 25     | 25.0                   | 230.0                         | 1.0          | 385                                  |               |               |

**Notes**

(1) Measured with full length lead

(2) Rated DC current based on maximum temperature rise as shown in table



| STANDARD ELECTRICAL SPECIFICATIONS |           |          |        |                        |                               |              |                                      |
|------------------------------------|-----------|----------|--------|------------------------|-------------------------------|--------------|--------------------------------------|
| MODEL                              | IND. (μH) | TOL. (%) | Q MIN. | TEST FREQUENCY Q (MHz) | SRF MIN. (MHz) <sup>(1)</sup> | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(2)</sup> |
| IM-2                               | 1.2       | ± 10     | 25     | 7.9                    | 150.0                         | 0.18         | 590                                  |
| IM-2                               | 1.5       | ± 10     | 28     | 7.9                    | 140.0                         | 0.22         | 535                                  |
| IM-2                               | 1.8       | ± 10     | 30     | 7.9                    | 125.0                         | 0.30         | 455                                  |
| IM-2                               | 2.2       | ± 10     | 30     | 7.9                    | 115.0                         | 0.40         | 395                                  |
| IM-2                               | 2.7       | ± 10     | 37     | 7.9                    | 100.0                         | 0.55         | 355                                  |
| IM-2                               | 3.3       | ± 10     | 45     | 7.9                    | 90.0                          | 0.85         | 270                                  |
| IM-2                               | 3.9       | ± 10     | 45     | 7.9                    | 80.0                          | 1.0          | 250                                  |
| IM-2                               | 4.7       | ± 10     | 45     | 7.9                    | 75.0                          | 1.2          | 230                                  |
| IM-2                               | 5.6       | ± 10     | 50     | 7.9                    | 65.0                          | 1.8          | 185                                  |
| IM-2                               | 6.8       | ± 10     | 50     | 7.9                    | 60.0                          | 2.0          | 175                                  |
| IM-2                               | 8.2       | ± 10     | 55     | 7.9                    | 55.0                          | 2.7          | 155                                  |
| IM-2                               | 10.0      | ± 10     | 55     | 7.9                    | 50.0                          | 3.7          | 130                                  |
| IM-2                               | 12.0      | ± 10     | 45     | 2.5                    | 40.0                          | 2.7          | 155                                  |
| IM-2                               | 15.0      | ± 10     | 40     | 2.5                    | 35.0                          | 2.8          | 150                                  |
| IM-2                               | 18.0      | ± 10     | 50     | 2.5                    | 30.0                          | 3.1          | 145                                  |
| IM-2                               | 22.0      | ± 10     | 50     | 2.5                    | 25.0                          | 3.3          | 140                                  |
| IM-2                               | 27.0      | ± 10     | 50     | 2.5                    | 20.0                          | 3.5          | 135                                  |
| IM-2                               | 33.0      | ± 10     | 45     | 2.5                    | 24.0                          | 3.4          | 130                                  |
| IM-2                               | 39.0      | ± 10     | 45     | 2.5                    | 22.0                          | 3.6          | 125                                  |
| IM-2                               | 47.0      | ± 10     | 45     | 2.5                    | 20.0                          | 4.5          | 110                                  |
| IM-2                               | 56.0      | ± 10     | 45     | 2.5                    | 18.0                          | 5.7          | 100                                  |
| IM-2                               | 68.0      | ± 10     | 50     | 2.5                    | 15.0                          | 6.7          | 92                                   |
| IM-2                               | 82.0      | ± 10     | 50     | 2.5                    | 14.0                          | 7.3          | 88                                   |
| IM-2                               | 100.0     | ± 10     | 50     | 2.5                    | 13.0                          | 8            | 84                                   |
| IM-2                               | 120.0     | ± 10     | 30     | 0.79                   | 12.0                          | 13           | 66                                   |
| IM-2                               | 150.0     | ± 10     | 30     | 0.79                   | 11.0                          | 15           | 61                                   |
| IM-2                               | 180.0     | ± 10     | 30     | 0.79                   | 10.0                          | 17           | 57                                   |
| IM-2                               | 220.0     | ± 10     | 30     | 0.79                   | 9.0                           | 21           | 52                                   |
| IM-2                               | 270.0     | ± 10     | 30     | 0.79                   | 8.0                           | 25           | 47                                   |
| IM-2                               | 330.0     | ± 10     | 30     | 0.79                   | 7.0                           | 28           | 45                                   |
| IM-2                               | 390.0     | ± 10     | 30     | 0.79                   | 6.5                           | 35           | 40                                   |
| IM-2                               | 470.0     | ± 10     | 30     | 0.79                   | 6.0                           | 42           | 36                                   |
| IM-2                               | 560.0     | ± 10     | 30     | 0.79                   | 5.0                           | 46           | 35                                   |
| IM-2                               | 680.0     | ± 10     | 30     | 0.79                   | 4.0                           | 60           | 30                                   |
| IM-2                               | 820.0     | ± 10     | 30     | 0.79                   | 3.8                           | 65           | 29                                   |
| IM-2                               | 1000.0    | ± 10     | 30     | 0.79                   | 3.4                           | 72           | 28                                   |
| IM-4                               | 0.15      | ± 20     | 50     | 25                     | 525.0                         | 0.03         | 2450                                 |
| IM-4                               | 0.22      | ± 20     | 50     | 25                     | 450.0                         | 0.055        | 1810                                 |
| IM-4                               | 0.33      | ± 20     | 45     | 25                     | 360.0                         | 0.09         | 1400                                 |
| IM-4                               | 0.47      | ± 20     | 45     | 25                     | 310.0                         | 0.12         | 1225                                 |
| IM-4                               | 0.56      | ± 10     | 50     | 25                     | 280.0                         | 0.135        | 1150                                 |
| IM-4                               | 0.68      | ± 10     | 50     | 25                     | 250.0                         | 0.15         | 1100                                 |
| IM-4                               | 0.82      | ± 10     | 50     | 25                     | 220.0                         | 0.22         | 900                                  |
| IM-4                               | 1.0       | ± 10     | 50     | 25                     | 200.0                         | 0.29         | 785                                  |
| IM-4                               | 1.2       | ± 10     | 33     | 7.9                    | 180.0                         | 0.42         | 650                                  |
| IM-4                               | 1.5       | ± 10     | 33     | 7.9                    | 160.0                         | 0.50         | 600                                  |
| IM-4                               | 1.8       | ± 10     | 33     | 7.9                    | 150.0                         | 0.65         | 525                                  |
| IM-4                               | 2.2       | ± 10     | 33     | 7.9                    | 135.0                         | 0.95         | 435                                  |
| IM-4                               | 2.7       | ± 10     | 33     | 7.9                    | 120.0                         | 1.20         | 385                                  |
| IM-4                               | 3.3       | ± 10     | 33     | 7.9                    | 110.0                         | 2.0          | 300                                  |
| IM-4                               | 3.9       | ± 10     | 33     | 7.9                    | 100.0                         | 2.30         | 280                                  |
| IM-4                               | 4.7       | ± 10     | 33     | 7.9                    | 90.0                          | 2.60         | 260                                  |
| IM-4                               | 5.6       | ± 10     | 45     | 7.9                    | 60.0                          | 0.32         | 495                                  |
| IM-4                               | 6.8       | ± 10     | 50     | 7.9                    | 55.0                          | 0.50         | 395                                  |
| IM-4                               | 8.2       | ± 10     | 50     | 7.9                    | 50.0                          | 0.60         | 360                                  |
| IM-4                               | 10.0      | ± 10     | 55     | 7.9                    | 45.0                          | 0.90         | 290                                  |
| IM-4                               | 12.0      | ± 10     | 65     | 2.5                    | 42.0                          | 1.10         | 265                                  |
| IM-4                               | 15.0      | ± 10     | 65     | 2.5                    | 40.0                          | 1.40         | 240                                  |

Notes

(1) Measured with full length lead

(2) Rated DC current based on maximum temperature rise as shown in table

| STANDARD ELECTRICAL SPECIFICATIONS |           |          |        |                        |                               |              |                                      |
|------------------------------------|-----------|----------|--------|------------------------|-------------------------------|--------------|--------------------------------------|
| MODEL                              | IND. (μH) | TOL. (%) | Q MIN. | TEST FREQUENCY Q (MHz) | SRF MIN. (MHz) <sup>(1)</sup> | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(2)</sup> |
| IM-4                               | 18.0      | ± 10     | 75     | 2.5                    | 34.0                          | 2.25         | 185                                  |
| IM-4                               | 22.0      | ± 10     | 75     | 2.5                    | 30.0                          | 2.50         | 175                                  |
| IM-4                               | 27.0      | ± 10     | 60     | 2.5                    | 25.0                          | 2.60         | 170                                  |
| IM-4                               | 33.0      | ± 10     | 65     | 2.5                    | 19.0                          | 3.0          | 165                                  |
| IM-4                               | 36.0      | ± 5      | 60     | 2.5                    | 15.5                          | 2.50         | 180                                  |
| IM-4                               | 39.0      | ± 5      | 60     | 2.5                    | 14.5                          | 2.60         | 176                                  |
| IM-4                               | 43.0      | ± 5      | 60     | 2.5                    | 13.7                          | 2.70         | 172                                  |
| IM-4                               | 47.0      | ± 5      | 55     | 2.5                    | 13.0                          | 2.75         | 170                                  |
| IM-4                               | 51.0      | ± 5      | 55     | 2.5                    | 12.7                          | 2.85         | 167                                  |
| IM-4                               | 56.0      | ± 5      | 55     | 2.5                    | 12.0                          | 3.00         | 164                                  |
| IM-4                               | 62.0      | ± 5      | 55     | 2.5                    | 11.5                          | 3.15         | 160                                  |
| IM-4                               | 68.0      | ± 5      | 55     | 2.5                    | 11.0                          | 3.30         | 156                                  |
| IM-4                               | 75.0      | ± 5      | 55     | 2.5                    | 10.5                          | 3.70         | 147                                  |
| IM-4                               | 82.0      | ± 5      | 50     | 2.5                    | 10.3                          | 3.90         | 143                                  |
| IM-4                               | 91.0      | ± 5      | 50     | 2.5                    | 10.0                          | 4.30         | 136                                  |
| IM-4                               | 100.0     | ± 5      | 50     | 2.5                    | 9.5                           | 4.50         | 133                                  |
| IM-4                               | 110.0     | ± 5      | 60     | 0.79                   | 8.9                           | 4.90         | 128                                  |
| IM-4                               | 120.0     | ± 5      | 65     | 0.79                   | 8.7                           | 5.20         | 124                                  |
| IM-4                               | 130.0     | ± 5      | 65     | 0.79                   | 8.5                           | 5.45         | 121                                  |
| IM-4                               | 150.0     | ± 5      | 65     | 0.79                   | 8.0                           | 6.05         | 114                                  |
| IM-4                               | 160.0     | ± 5      | 65     | 0.79                   | 7.5                           | 6.40         | 111                                  |
| IM-4                               | 180.0     | ± 5      | 65     | 0.79                   | 7.0                           | 6.75         | 108                                  |
| IM-4                               | 200.0     | ± 5      | 65     | 0.79                   | 6.5                           | 7.10         | 106                                  |
| IM-4                               | 220.0     | ± 5      | 65     | 0.79                   | 6.2                           | 7.45         | 103                                  |
| IM-4                               | 240.0     | ± 5      | 65     | 0.79                   | 5.9                           | 7.80         | 101                                  |
| IM-4                               | 270.0     | ± 5      | 65     | 0.79                   | 5.7                           | 11.0         | 129                                  |
| IM-4                               | 300.0     | ± 5      | 65     | 0.79                   | 5.4                           | 11.5         | 125                                  |
| IM-4                               | 330.0     | ± 5      | 65     | 0.79                   | 5.1                           | 12.0         | 123                                  |
| IM-4                               | 360.0     | ± 5      | 65     | 0.79                   | 4.8                           | 15.5         | 108                                  |
| IM-4                               | 390.0     | ± 5      | 65     | 0.79                   | 4.5                           | 16.3         | 105                                  |
| IM-4                               | 430.0     | ± 5      | 65     | 0.79                   | 4.2                           | 17.1         | 102                                  |
| IM-4                               | 470.0     | ± 5      | 65     | 0.79                   | 3.9                           | 17.9         | 100                                  |
| IM-4                               | 510.0     | ± 5      | 65     | 0.79                   | 3.7                           | 18.8         | 98                                   |
| IM-4                               | 560.0     | ± 5      | 65     | 0.79                   | 3.5                           | 24.7         | 85                                   |
| IM-4                               | 620.0     | ± 5      | 65     | 0.79                   | 3.3                           | 25.9         | 83                                   |
| IM-4                               | 680.0     | ± 5      | 55     | 0.79                   | 3.1                           | 27.2         | 81                                   |
| IM-4                               | 750.0     | ± 5      | 55     | 0.79                   | 2.9                           | 28.6         | 79                                   |
| IM-4                               | 820.0     | ± 5      | 55     | 0.79                   | 2.7                           | 30.0         | 77                                   |
| IM-4                               | 910.0     | ± 5      | 55     | 0.79                   | 2.5                           | 31.5         | 76                                   |
| IM-4                               | 1000.0    | ± 5      | 55     | 0.79                   | 2.3                           | 33.1         | 74                                   |
| IM-4                               | 1100.0    | ± 5      | 30     | 0.25                   | 2.1                           | 43.5         | 64                                   |
| IM-4                               | 1200.0    | ± 5      | 30     | 0.25                   | 2.0                           | 45.7         | 63                                   |
| IM-4                               | 1300.0    | ± 5      | 30     | 0.25                   | 1.9                           | 49.0         | 61                                   |
| IM-4                               | 1500.0    | ± 5      | 30     | 0.25                   | 1.8                           | 52.5         | 59                                   |
| IM-4                               | 1600.0    | ± 5      | 30     | 0.25                   | 1.7                           | 54.0         | 58                                   |
| IM-4                               | 1800.0    | ± 5      | 30     | 0.25                   | 1.6                           | 56.7         | 56                                   |
| IM-6                               | 0.10      | ± 20     | 55     | 25.0                   | 510.0                         | 0.020        | 3600                                 |
| IM-6                               | 0.12      | ± 20     | 55     | 25.0                   | 510.0                         | 0.025        | 3300                                 |
| IM-6                               | 0.15      | ± 20     | 55     | 25.0                   | 510.0                         | 0.030        | 3000                                 |
| IM-6                               | 0.18      | ± 20     | 55     | 25.0                   | 450.0                         | 0.030        | 2900                                 |
| IM-6                               | 0.22      | ± 20     | 50     | 25.0                   | 415.0                         | 0.035        | 2800                                 |
| IM-6                               | 0.27      | ± 20     | 50     | 25.0                   | 380.0                         | 0.050        | 2400                                 |
| IM-6                               | 0.33      | ± 20     | 50     | 25.0                   | 350.0                         | 0.065        | 2000                                 |
| IM-6                               | 0.39      | ± 20     | 50     | 25.0                   | 320.0                         | 0.080        | 1800                                 |
| IM-6                               | 0.47      | ± 20     | 50     | 25.0                   | 300.0                         | 0.085        | 1700                                 |
| IM-6                               | 0.56      | ± 10     | 50     | 25.0                   | 270.0                         | 0.125        | 1450                                 |

IRON CORE

PHENOLIC CORE

**Notes**

<sup>(1)</sup> Measured with full length lead

<sup>(2)</sup> Rated DC current based on maximum temperature rise as shown in table



| STANDARD ELECTRICAL SPECIFICATIONS |           |          |        |                        |                               |              |                                      |               |
|------------------------------------|-----------|----------|--------|------------------------|-------------------------------|--------------|--------------------------------------|---------------|
| MODEL                              | IND. (μH) | TOL. (%) | Q MIN. | TEST FREQUENCY Q (MHz) | SRF MIN. (MHz) <sup>(1)</sup> | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(2)</sup> |               |
| IM-6                               | 0.68      | ± 10     | 45     | 25.0                   | 250.0                         | 0.150        | 1300                                 | PHENOLIC CORE |
| IM-6                               | 0.82      | ± 10     | 40     | 25.0                   | 210.0                         | 0.205        | 1100                                 |               |
| IM-6                               | 1.0       | ± 10     | 40     | 25.0                   | 200.0                         | 0.290        | 930                                  |               |
| IM-6                               | 1.2       | ± 10     | 30     | 7.9                    | 180.0                         | 0.400        | 785                                  |               |
| IM-6                               | 1.5       | ± 10     | 30     | 7.9                    | 170.0                         | 0.485        | 700                                  |               |
| IM-6                               | 1.8       | ± 10     | 30     | 7.9                    | 150.0                         | 0.740        | 580                                  |               |
| IM-6                               | 2.2       | ± 10     | 30     | 7.9                    | 140.0                         | 0.970        | 505                                  |               |
| IM-6                               | 2.7       | ± 10     | 30     | 7.9                    | 120.0                         | 1.20         | 460                                  |               |
| IM-6                               | 3.3       | ± 10     | 30     | 7.9                    | 70.0                          | 0.140        | 990                                  | IRON CORE     |
| IM-6                               | 3.9       | ± 10     | 30     | 7.9                    | 65.0                          | 0.155        | 870                                  |               |
| IM-6                               | 4.7       | ± 10     | 30     | 7.9                    | 60.0                          | 0.210        | 745                                  |               |
| IM-6                               | 5.6       | ± 10     | 30     | 7.9                    | 50.0                          | 0.280        | 645                                  |               |
| IM-6                               | 6.8       | ± 10     | 30     | 7.9                    | 50.0                          | 0.375        | 560                                  |               |
| IM-6                               | 8.2       | ± 10     | 30     | 7.9                    | 48.0                          | 0.440        | 540                                  |               |
| IM-6                               | 10.0      | ± 10     | 30     | 7.9                    | 42.0                          | 0.605        | 440                                  |               |
| IM-6                               | 12.0      | ± 10     | 50     | 2.5                    | 36.0                          | 1.05         | 370                                  |               |
| IM-6                               | 15.0      | ± 10     | 55     | 2.5                    | 30.0                          | 1.20         | 310                                  |               |
| IM-6                               | 18.0      | ± 10     | 60     | 2.5                    | 30.0                          | 1.95         | 255                                  |               |
| IM-6                               | 22.0      | ± 10     | 60     | 2.5                    | 24.0                          | 2.20         | 240                                  |               |
| IM-6                               | 27.0      | ± 10     | 65     | 2.5                    | 22.0                          | 2.75         | 205                                  |               |
| IM-6                               | 33.0      | ± 10     | 75     | 2.5                    | 20.0                          | 3.5          | 185                                  |               |
| IM-6                               | 39.0      | ± 10     | 75     | 2.5                    | 18.0                          | 3.8          | 176                                  |               |
| IM-6                               | 47.0      | ± 10     | 75     | 2.5                    | 16.0                          | 4.0          | 170                                  |               |
| IM-6                               | 56.0      | ± 10     | 75     | 2.5                    | 15.0                          | 4.4          | 164                                  |               |
| IM-6                               | 68.0      | ± 10     | 75     | 2.5                    | 12.0                          | 4.7          | 156                                  |               |
| IM-6                               | 82.0      | ± 10     | 75     | 2.5                    | 10.0                          | 5.3          | 143                                  |               |
| IM-6                               | 100.0     | ± 10     | 65     | 2.5                    | 8.0                           | 6.0          | 133                                  |               |
| IM-6                               | 120.0     | ± 10     | 65     | 0.79                   | 6.0                           | 5.0          | 124                                  |               |
| IM-6                               | 150.0     | ± 10     | 65     | 0.79                   | 5.4                           | 5.8          | 118                                  |               |
| IM-6                               | 180.0     | ± 10     | 65     | 0.79                   | 5.0                           | 6.6          | 114                                  |               |
| IM-6                               | 220.0     | ± 10     | 65     | 0.79                   | 4.7                           | 7.4          | 112                                  |               |
| IM-6                               | 270.0     | ± 5      | 65     | 0.79                   | 5.6                           | 8.2          | 110                                  |               |
| IM-6                               | 300.0     | ± 5      | 65     | 0.79                   | 5.3                           | 8.7          | 107                                  |               |
| IM-6                               | 330.0     | ± 5      | 65     | 0.79                   | 5.0                           | 9.1          | 105                                  |               |
| IM-6                               | 360.0     | ± 5      | 65     | 0.79                   | 4.7                           | 9.6          | 102                                  |               |
| IM-6                               | 390.0     | ± 5      | 65     | 0.79                   | 4.5                           | 10.0         | 100                                  |               |
| IM-6                               | 430.0     | ± 5      | 65     | 0.79                   | 4.3                           | 10.6         | 97                                   |               |
| IM-6                               | 470.0     | ± 5      | 65     | 0.79                   | 4.0                           | 11.1         | 95                                   |               |
| IM-6                               | 510.0     | ± 5      | 65     | 0.79                   | 3.8                           | 11.6         | 93                                   |               |
| IM-6                               | 560.0     | ± 5      | 65     | 0.79                   | 3.6                           | 12.3         | 91                                   |               |
| IM-6                               | 620.0     | ± 5      | 60     | 0.79                   | 3.5                           | 13.0         | 88                                   |               |
| IM-6                               | 680.0     | ± 5      | 60     | 0.79                   | 3.4                           | 13.7         | 85                                   |               |
| IM-6                               | 750.0     | ± 5      | 60     | 0.79                   | 3.3                           | 14.4         | 83                                   |               |
| IM-6                               | 820.0     | ± 5      | 60     | 0.79                   | 3.1                           | 15.1         | 81                                   |               |
| IM-6                               | 910.0     | ± 5      | 60     | 0.79                   | 2.9                           | 15.8         | 79                                   |               |
| IM-6                               | 1000.0    | ± 5      | 60     | 0.79                   | 2.8                           | 16.5         | 78                                   |               |
| IM-8                               | 1100.0    | ± 5      | 60     | 0.25                   | 2.8                           | 21.0         | 78                                   | IRON CORE     |
| IM-8                               | 1200.0    | ± 5      | 60     | 0.25                   | 2.7                           | 22.0         | 76                                   |               |
| IM-8                               | 1300.0    | ± 5      | 60     | 0.25                   | 2.6                           | 23.0         | 75                                   |               |
| IM-8                               | 1500.0    | ± 5      | 65     | 0.25                   | 2.4                           | 25.0         | 72                                   |               |
| IM-8                               | 1600.0    | ± 5      | 65     | 0.25                   | 2.3                           | 26.0         | 70                                   |               |
| IM-8                               | 1800.0    | ± 5      | 65     | 0.25                   | 2.2                           | 28.0         | 68                                   |               |
| IM-8                               | 2000.0    | ± 5      | 65     | 0.25                   | 2.1                           | 29.0         | 67                                   |               |

**Notes**

<sup>(1)</sup> Measured with full length lead

<sup>(2)</sup> Rated DC current based on maximum temperature rise as shown in table



| STANDARD ELECTRICAL SPECIFICATIONS |           |          |        |                        |                               |              |                                      |
|------------------------------------|-----------|----------|--------|------------------------|-------------------------------|--------------|--------------------------------------|
| MODEL                              | IND. (μH) | TOL. (%) | Q MIN. | TEST FREQUENCY Q (MHz) | SRF MIN. (MHz) <sup>(1)</sup> | DCR MAX. (Ω) | RATED DC CURRENT (mA) <sup>(2)</sup> |
| IM-8                               | 2200.0    | ± 5      | 70     | 0.25                   | 2.0                           | 30.0         | 66                                   |
| IM-8                               | 2400.0    | ± 5      | 70     | 0.25                   | 1.9                           | 31.0         | 64                                   |
| IM-8                               | 2700.0    | ± 5      | 70     | 0.25                   | 1.8                           | 33.0         | 62                                   |
| IM-8                               | 3000.0    | ± 5      | 70     | 0.25                   | 1.7                           | 35.0         | 61                                   |
| IM-8                               | 3300.0    | ± 5      | 70     | 0.25                   | 1.6                           | 38.0         | 58                                   |
| IM-8                               | 3600.0    | ± 5      | 70     | 0.25                   | 1.5                           | 40.0         | 57                                   |
| IM-9                               | 68.0      | ± 10     | 70     | 2.5                    | 13.0                          | 3.3          | 168                                  |
| IM-9                               | 82.0      | ± 10     | 65     | 2.5                    | 11.7                          | 3.5          | 162                                  |
| IM-9                               | 100.0     | ± 10     | 65     | 2.5                    | 10.7                          | 3.8          | 155                                  |
| IM-9                               | 120.0     | ± 10     | 75     | 0.79                   | 9.3                           | 4.7          | 142                                  |
| IM-9                               | 150.0     | ± 10     | 75     | 0.79                   | 8.3                           | 5.3          | 132                                  |
| IM-10                              | 3900.0    | ± 5      | 80     | 0.25                   | 1.45                          | 44.0         | 61                                   |
| IM-10                              | 4300.0    | ± 5      | 80     | 0.25                   | 1.40                          | 46.0         | 59                                   |
| IM-10                              | 4700.0    | ± 5      | 80     | 0.25                   | 1.35                          | 48.0         | 58                                   |
| IM-10                              | 5000.0    | ± 5      | 80     | 0.25                   | 1.30                          | 50.0         | 57                                   |
| IM-10                              | 5600.0    | ± 5      | 80     | 0.25                   | 1.25                          | 53.0         | 56                                   |
| IM-10                              | 6200.0    | ± 5      | 80     | 0.25                   | 1.20                          | 56.0         | 54                                   |
| IM-10                              | 6800.0    | ± 5      | 80     | 0.25                   | 1.15                          | 59.0         | 52                                   |
| IM-10                              | 7500.0    | ± 5      | 80     | 0.25                   | 1.10                          | 62.0         | 51                                   |
| IM-10                              | 8200.0    | ± 5      | 80     | 0.25                   | 1.05                          | 65.0         | 50                                   |
| IM-10                              | 9100.0    | ± 5      | 80     | 0.25                   | 1.00                          | 68.0         | 49                                   |
| IM-10                              | 10 000.0  | ± 5      | 80     | 0.25                   | 0.95                          | 72.0         | 47                                   |

Notes

<sup>(1)</sup> Measured with full length lead

<sup>(2)</sup> Rated DC current based on maximum temperature rise as shown in table

| ORDERING INFORMATION |                  |                      |              |                               |
|----------------------|------------------|----------------------|--------------|-------------------------------|
| IM-2                 | 10 μH            | ± 10 %               | ER           | e2                            |
| MODEL                | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER |   |   |                      |
|--------------------|---|---|----------------------|
| I                  | M | 0 | 2                    |
| MODEL              |   |   |                      |
| E                  | R |   |                      |
| PACKAGE CODE       |   |   |                      |
| 1                  | 0 | 0 |                      |
| INDUCTANCE VALUE   |   |   |                      |
|                    |   |   | K                    |
|                    |   |   | INDUCTANCE TOLERANCE |



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