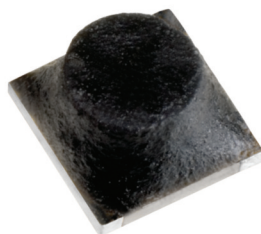
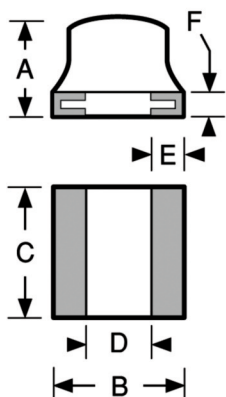


**SERIES****105R & 108R  
105 & 108****Micro i® Chip Inductors**

Actual Size

**Military Specifications**

Series 105 MIL-PRF-83446 (Reference)

Series 108 MIL-PRF-83446/8 (Reference)

**Physical Parameters for Series 105**

|   | Inches            | Millimeters      |
|---|-------------------|------------------|
| A | 0.075 Max.        | 1.91 Max.        |
| B | 0.100 ± 0.010     | 2.54 ± 0.25      |
| C | 0.100 ± 0.010     | 2.54 ± 0.25      |
| D | 0.050 Min.        | 1.27 Min.        |
| E | 0.015 Min. (Typ.) | 0.38 Min. (Typ.) |
| F | 0.020 Max. (Typ.) | 0.51 Max. (Typ.) |

**Physical Parameters for Series 108**

|   | Inches               | Millimeters         |
|---|----------------------|---------------------|
| A | 0.070 Max.           | 1.78 Max.           |
| B | 0.100 ± 0.010        | 2.54 ± 0.254        |
| C | 0.100 ± 0.010        | 2.54 ± 0.254        |
| D | 0.050 Min.           | 1.27 Min.           |
| E | 0.025 ± 0.005 (Typ.) | 0.635 ± 0.13 (Typ.) |
| F | 0.020 Max. (Typ.)    | 0.51 Max. (Typ.)    |

**Weight Max.** (Grams) 0.05**Current Rating at 90°C Ambient** 35°C Rise**Operating Temperature Range** -55°C to +125°C**Maximum Power Dissipation at 90°C** 0.135 W

**Mechanical Configuration** Units are epoxy encapsulated. Contact areas for reflow soldering are gold plated per MIL-G-45204 Type 1-Grade A. Internal connections are thermal compression bonded.

**Packaging** Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

**Made in the U.S.A.**

| MIL DASH # (Reference)                             | DASH NUMBER* | INDUCTANCE (μH) | TOLERANCE | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
|----------------------------------------------------|--------------|-----------------|-----------|-----------|----------------------|-------------------|------------------------------|-----------------------------|
| <b>SERIES 105 IRON CORE</b>                        |              |                 |           |           |                      |                   |                              |                             |
| -121M                                              |              | 0.12            | ± 20%     | 40        | 25.0                 | 500               | 0.14                         | 830                         |
| -151M                                              |              | 0.15            | ± 20%     | 40        | 25.0                 | 440               | 0.16                         | 775                         |
| -181M                                              |              | 0.18            | ± 20%     | 40        | 25.0                 | 405               | 0.19                         | 710                         |
| -221K                                              |              | 0.22            | ± 10%     | 40        | 25.0                 | 360               | 0.21                         | 675                         |
| -271K                                              |              | 0.27            | ± 10%     | 40        | 25.0                 | 330               | 0.23                         | 650                         |
| -331K                                              |              | 0.33            | ± 10%     | 35        | 25.0                 | 280               | 0.25                         | 620                         |
| -391K                                              |              | 0.39            | ± 10%     | 35        | 25.0                 | 185               | 0.28                         | 585                         |
| -471K                                              |              | 0.47            | ± 10%     | 35        | 25.0                 | 178               | 0.31                         | 555                         |
| -561K                                              |              | 0.56            | ± 10%     | 35        | 25.0                 | 163               | 0.45                         | 460                         |
| -681K                                              |              | 0.68            | ± 10%     | 35        | 25.0                 | 160               | 0.62                         | 395                         |
| -821K                                              |              | 0.82            | ± 10%     | 30        | 25.0                 | 155               | 0.65                         | 385                         |
| -102K                                              |              | 1.0             | ± 10%     | 30        | 25.0                 | 130               | 0.73                         | 360                         |
| -122K                                              |              | 1.2             | ± 10%     | 25        | 7.9                  | 115               | 1.0                          | 310                         |
| -152K                                              |              | 1.5             | ± 10%     | 25        | 7.9                  | 100               | 1.2                          | 280                         |
| -182K                                              |              | 1.8             | ± 10%     | 25        | 7.9                  | 90                | 1.5                          | 250                         |
| -222K                                              |              | 2.2             | ± 10%     | 25        | 7.9                  | 75                | 1.7                          | 235                         |
| -272K                                              |              | 2.7             | ± 10%     | 25        | 7.9                  | 68                | 2.0                          | 220                         |
| -332K                                              |              | 3.3             | ± 10%     | 25        | 7.9                  | 62                | 2.2                          | 210                         |
| -392K                                              |              | 3.9             | ± 10%     | 25        | 7.9                  | 57                | 2.8                          | 185                         |
| -472K                                              |              | 4.7             | ± 10%     | 30        | 7.9                  | 52                | 3.1                          | 175                         |
| -562K                                              |              | 5.6             | ± 10%     | 30        | 7.9                  | 47                | 3.3                          | 170                         |
| -682K                                              |              | 6.8             | ± 10%     | 30        | 7.9                  | 42                | 3.8                          | 160                         |
| -822K                                              |              | 8.2             | ± 10%     | 30        | 7.9                  | 40                | 5.0                          | 135                         |
| -103K                                              |              | 10.0            | ± 10%     | 30        | 7.9                  | 38                | 5.6                          | 130                         |
| <b>M83446/08- (Reference) SERIES 108 IRON CORE</b> |              |                 |           |           |                      |                   |                              |                             |
| -123K                                              | 87           | 12.0            | ± 10%     | 36        | 2.5                  | 26.0              | 4.0                          | 79                          |
| -153K                                              | 88           | 15.0            | ± 10%     | 32        | 2.5                  | 24.0              | 4.2                          | 79                          |
| -183K                                              | 89           | 18.0            | ± 10%     | 32        | 2.5                  | 21.0              | 4.4                          | 75                          |
| -223K                                              | 90           | 22.0            | ± 10%     | 32        | 2.5                  | 19.0              | 7.5                          | 57                          |
| -273K                                              | 91           | 27.0            | ± 10%     | 32        | 2.5                  | 14.0              | 8.0                          | 55                          |
| -333K                                              | 92           | 33.0            | ± 10%     | 30        | 2.5                  | 12.0              | 13.0                         | 45                          |
| -393K                                              | 93           | 39.0            | ± 10%     | 30        | 2.5                  | 10.0              | 17.0                         | 38                          |
| -473K                                              | 94           | 47.0            | ± 10%     | 30        | 2.5                  | 9.0               | 19.0                         | 36                          |
| -563K                                              | 95           | 56.0            | ± 10%     | 30        | 2.5                  | 8.5               | 23.0                         | 33                          |
| -683K                                              | 96           | 68.0            | ± 10%     | 30        | 2.5                  | 8.2               | 25.0                         | 32                          |
| -823K                                              | 97           | 82.0            | ± 10%     | 30        | 2.5                  | 8.0               | 28.0                         | 30                          |
| -104K                                              | 98           | 100.0           | ± 10%     | 30        | 2.5                  | 7.0               | 31.0                         | 28                          |

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

\*Complete part # must include series # PLUS the dash #

For surface finish information, refer to [www.delevanfinishes.com](http://www.delevanfinishes.com)