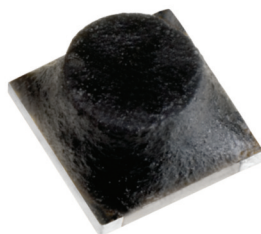
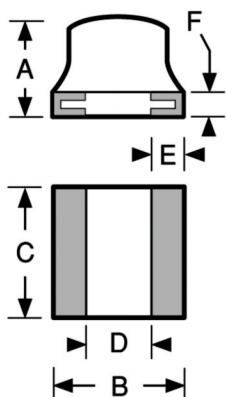


**SERIES****105R & 108R  
105 & 108****Micro i® Chip Inductors**

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)  
MAXIMUM (MHz)  
DC RESISTANCE MAXIMUM (OHMS)  
CURRENT RATING MAXIMUM (mA)

**SERIES 105 IRON CORE**

|       |  |      |       |    |      |     |      |     |
|-------|--|------|-------|----|------|-----|------|-----|
| -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 |

**M83446/08- (Reference) SERIES 108 IRON CORE**

|       |    |       |       |    |     |      |      |    |
|-------|----|-------|-------|----|-----|------|------|----|
| -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)