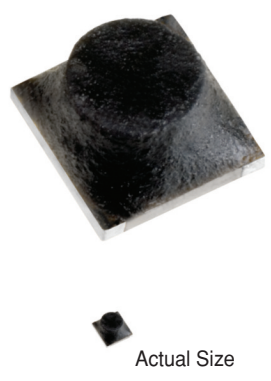
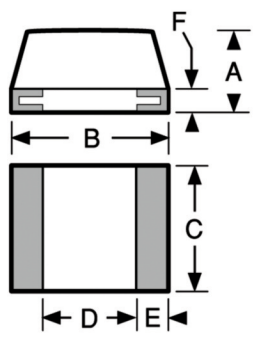


SERIES

**160R
160**



Micro i® Chip Inductors



Military Specifications MIL-PRF-83446/38

Physical Parameters

| | Inches | Millimeters |
|---|-------------------|----------------|
| A | 0.080 Max. | 2.03 Max. |
| B | 0.145 to 0.155 | 3.68 to 3.94 |
| C | 0.115 to 0.125 | 2.92 to 3.18 |
| D | 0.070 Min. | 1.78 Min. |
| E | 0.020 to 0.030 | 0.508 to 0.762 |
| F | 0.020 Max. (Typ.) | 0.51 Max. |

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.175 W

Termination Standard: Tin/Lead Sn63

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Optional marking is available. Parts can be printed with dash number (ie 100, 120, etc.). Add suffix M to part number.

For inductance values above 560µH, consult factory.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow are solder coated. Internal connections are thermal compression bonded.

Packaging Bulk only

Made in the U.S.A.

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

| DASH NUMBER* | MIL DASH # | INDUCTANCE (µH) | TOLERANCE | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | MAXIMUM (OHMS) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
|--------------|------------|-----------------|-----------|-----------|----------------------|-------------------|----------------|------------------------------|-----------------------------|
|--------------|------------|-----------------|-----------|-----------|----------------------|-------------------|----------------|------------------------------|-----------------------------|

| M83446/38 - SERIES 160 PHENOLIC CORE | | | | | | | | | |
|--------------------------------------|----|-------|-------|----|------|------|-------|------|--|
| -100MS | 01 | 0.010 | ± 20% | 48 | 150 | 900 | 0.050 | 1590 | |
| -120MS | 02 | 0.012 | ± 20% | 48 | 150 | 900 | 0.055 | 1515 | |
| -150MS | 03 | 0.015 | ± 20% | 48 | 150 | 900 | 0.060 | 1450 | |
| -180MS | 04 | 0.018 | ± 20% | 48 | 150 | 900 | 0.065 | 1395 | |
| -220MS | 05 | 0.022 | ± 20% | 48 | 100 | 900 | 0.070 | 1345 | |
| -270MS | 06 | 0.027 | ± 20% | 48 | 100 | 900 | 0.075 | 1295 | |
| -330MS | 07 | 0.033 | ± 20% | 48 | 100 | 900 | 0.075 | 1295 | |
| -390MS | 08 | 0.039 | ± 20% | 48 | 100 | 900 | 0.080 | 1255 | |
| -470MS | 09 | 0.047 | ± 20% | 48 | 100 | 850 | 0.085 | 1220 | |
| -560MS | 10 | 0.056 | ± 20% | 48 | 100 | 800 | 0.088 | 1195 | |
| -680MS | 11 | 0.068 | ± 20% | 48 | 100 | 750 | 0.093 | 1165 | |
| -820MS | 12 | 0.082 | ± 20% | 48 | 100 | 700 | 0.095 | 1150 | |
| M83446/38 - SERIES 160 IRON CORE | | | | | | | | | |
| -101KS | 13 | 0.100 | ± 10% | 50 | 25.0 | 600 | 0.075 | 1295 | |
| -121KS | 14 | 0.120 | ± 10% | 50 | 25.0 | 550 | 0.075 | 1295 | |
| -151KS | 15 | 0.150 | ± 10% | 50 | 25.0 | 420 | 0.085 | 1220 | |
| -181KS | 16 | 0.180 | ± 10% | 50 | 25.0 | 390 | 0.10 | 1125 | |
| -221KS | 17 | 0.220 | ± 10% | 50 | 25.0 | 340 | 0.11 | 1070 | |
| -271KS | 18 | 0.270 | ± 10% | 50 | 25.0 | 290 | 0.12 | 1025 | |
| -301KS | 19 | 0.300 | ± 10% | 50 | 25.0 | 250 | 0.13 | 985 | |
| -331KS | 20 | 0.330 | ± 10% | 50 | 25.0 | 230 | 0.14 | 950 | |
| -361KS | 21 | 0.360 | ± 10% | 50 | 25.0 | 220 | 0.15 | 915 | |
| -391KS | 22 | 0.390 | ± 10% | 50 | 25.0 | 210 | 0.16 | 890 | |
| -421KS | 23 | 0.430 | ± 10% | 50 | 25.0 | 200 | 0.17 | 860 | |
| -471KS | 24 | 0.470 | ± 10% | 50 | 25.0 | 190 | 0.18 | 835 | |
| -561KS | 25 | 0.560 | ± 10% | 50 | 25.0 | 180 | 0.20 | 795 | |
| -681KS | 26 | 0.680 | ± 10% | 50 | 25.0 | 170 | 0.23 | 740 | |
| -821KS | 27 | 0.820 | ± 10% | 50 | 25.0 | 150 | 0.26 | 695 | |
| -102JS | 28 | 1.00 | ± 5% | 50 | 25.0 | 140 | 0.34 | 610 | |
| -122JS | 29 | 1.20 | ± 5% | 36 | 7.9 | 130 | 0.42 | 545 | |
| -152JS | 30 | 1.50 | ± 5% | 36 | 7.9 | 120 | 0.56 | 475 | |
| -182JS | 31 | 1.80 | ± 5% | 36 | 7.9 | 100 | 0.76 | 410 | |
| -222JS | 32 | 2.20 | ± 5% | 36 | 7.9 | 98 | 0.93 | 370 | |
| -272JS | 33 | 2.70 | ± 5% | 40 | 7.9 | 91 | 1.2 | 325 | |
| -332JS | 34 | 3.30 | ± 5% | 40 | 7.9 | 76 | 1.3 | 310 | |
| -392JS | 35 | 3.90 | ± 5% | 47 | 7.9 | 48 | 1.5 | 290 | |
| -472JS | 36 | 4.70 | ± 5% | 47 | 7.9 | 46 | 1.7 | 275 | |
| -562JS | 37 | 5.60 | ± 5% | 44 | 7.9 | 42 | 1.8 | 270 | |
| -682JS | 38 | 6.80 | ± 5% | 40 | 7.9 | 39 | 1.9 | 255 | |
| -822JS | 39 | 8.20 | ± 5% | 40 | 7.9 | 30 | 2.4 | 230 | |
| -103JS | 40 | 10.0 | ± 5% | 46 | 7.9 | 26 | 3.2 | 200 | |
| -123JS | 41 | 12.0 | ± 5% | 41 | 2.5 | 24 | 3.7 | 185 | |
| -153JS | 42 | 15.0 | ± 5% | 46 | 2.5 | 23 | 3.8 | 180 | |
| -183JS | 43 | 18.0 | ± 5% | 46 | 2.5 | 22 | 4.2 | 175 | |
| -223JS | 44 | 22.0 | ± 5% | 47 | 2.5 | 18 | 5.5 | 150 | |
| -273JS | 45 | 27.0 | ± 5% | 47 | 2.5 | 17 | 6.1 | 145 | |
| -333JS | 46 | 33.0 | ± 5% | 47 | 2.5 | 13 | 6.6 | 140 | |
| -393JS | 47 | 39.0 | ± 5% | 50 | 2.5 | 12 | 7.0 | 135 | |
| M83446/38 - SERIES 160 FERRITE CORE | | | | | | | | | |
| -473JS | 48 | 47.0 | ± 5% | 50 | 2.5 | 11.0 | 8.3 | 125 | |
| -563JS | 49 | 56.0 | ± 5% | 50 | 2.5 | 10.0 | 8.9 | 120 | |
| -683JS | 50 | 68.0 | ± 5% | 50 | 2.5 | 9.1 | 13.0 | 100 | |
| -823JS | 51 | 82.0 | ± 5% | 50 | 2.5 | 8.6 | 14.0 | 95 | |
| -104JS | 52 | 100.0 | ± 5% | 47 | 2.5 | 7.6 | 16.0 | 90 | |
| -124JS | 53 | 120.0 | ± 5% | 30 | 0.79 | 6.8 | 17.0 | 85 | |
| -154JS | 54 | 150.0 | ± 5% | 32 | 0.79 | 5.6 | 18.0 | 80 | |
| -184JS | 55 | 180.0 | ± 5% | 32 | 0.79 | 4.5 | 22.0 | 75 | |
| -224JS | 56 | 220.0 | ± 5% | 32 | 0.79 | 4.0 | 28.0 | 70 | |
| -274JS | 57 | 270.0 | ± 5% | 32 | 0.79 | 3.8 | 32.0 | 65 | |
| -334JS | 58 | 330.0 | ± 5% | 32 | 0.79 | 3.5 | 44.0 | 55 | |
| -394JS | 59 | 390.0 | ± 5% | 32 | 0.79 | 3.4 | 48.0 | 50 | |
| -474JS | 60 | 470.0 | ± 5% | 28 | 0.79 | 3.2 | 75.0 | 42 | |
| -564JS | 61 | 560.0 | ± 5% | 28 | 0.79 | 2.8 | 81.0 | 40 | |