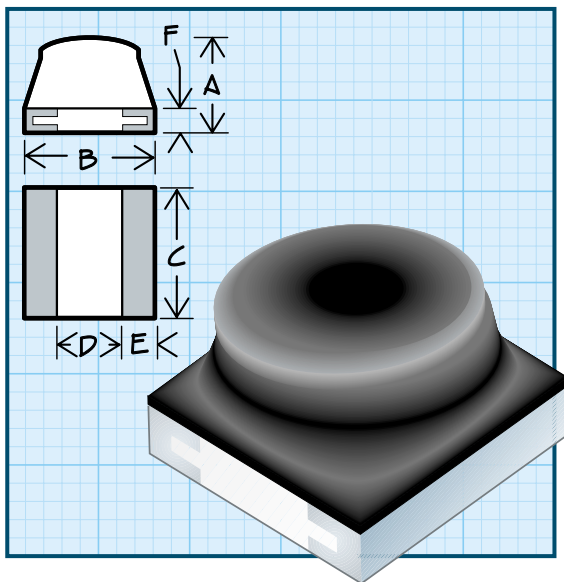


**Micro i<sup>®</sup> Chip Inductors**



**Physical Parameters**

|   | Inches           | Millimeters      |
|---|------------------|------------------|
| A | 0.140 Max.       | 3.56 Max.        |
| B | 0.147 to 0.163   | 3.73 to 4.14     |
| C | 0.117 to 0.133   | 2.97 to 3.38     |
| D | 0.070 Min.       | 1.78 Min.        |
| E | 0.017 to 0.033   | 0.43 to 0.84     |
| F | 0.020 Max. (Typ) | 0.51 Max. (Typ.) |

**Current Rating at 90°C Ambient** 35°C Rise

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

**Maximum Power Dissipation at 90°C** 0.155 W

**Inductance tolerance** desired is specified by suffixing an alpha character to the part number: F = 1%, G = 2%, H = 3%, J = 5%, K = 10%, and M = 20%. Standard series tolerance is ±10%. For inductance values less than .10µH, minimum tolerance is ±5%.

**Termination** Standard-Tin/Lead Sn63. For RoHS, order 3094R - XXXKS. Contact factory for other finish options.

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

**Packaging** Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

**MIL-PRF-83446/10** (Reference)

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

**For further surface finish information, refer to TECHNICAL section of this catalog.**

*Made in the U.S.A.*

**M83446/10- (Reference) SERIES 3094 IRON CORE**

|        | DASH NUMBER* | MIL DASH # (Reference) | INDUCTANCE (µH) ± 10% | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAX. (mA) |
|--------|--------------|------------------------|-----------------------|-----------|----------------------|-------------------|------------------------------|--------------------------|
| -100KS | 62           | 0.010                  | 60                    | 150       | 2000.0               | 0.040             | 1000                         |                          |
| -120KS | 63           | 0.012                  | 60                    | 150       | 1800.0               | 0.040             | 1000                         |                          |
| -150KS | 64           | 0.015                  | 60                    | 150       | 1500.0               | 0.040             | 1000                         |                          |
| -180KS | 65           | 0.018                  | 60                    | 150       | 1500.0               | 0.040             | 1000                         |                          |
| -220KS | 66           | 0.022                  | 60                    | 100       | 1300.0               | 0.050             | 1000                         |                          |
| -270KS | 67           | 0.027                  | 60                    | 100       | 1300.0               | 0.050             | 1000                         |                          |
| -330KS | 68           | 0.033                  | 60                    | 100       | 1000.0               | 0.050             | 1000                         |                          |
| -390KS | 69           | 0.039                  | 60                    | 100       | 1000.0               | 0.060             | 900                          |                          |
| -470KS | 70           | 0.047                  | 65                    | 100       | 800.0                | 0.060             | 900                          |                          |
| -560KS | 71           | 0.056                  | 65                    | 100       | 760.0                | 0.060             | 900                          |                          |
| -680KS | 72           | 0.068                  | 65                    | 100       | 700.0                | 0.070             | 840                          |                          |
| -820KS | 73           | 0.082                  | 65                    | 100       | 650.0                | 0.070             | 840                          |                          |
| -101KS | 74           | 0.100                  | 65                    | 50        | 570.0                | 0.070             | 840                          |                          |
| -121KS | 75           | 0.120                  | 65                    | 50        | 520.0                | 0.070             | 840                          |                          |
| -151KS | 76           | 0.150                  | 75                    | 50        | 400.0                | 0.080             | 790                          |                          |
| -181KS | 77           | 0.180                  | 75                    | 50        | 360.0                | 0.080             | 790                          |                          |
| -221KS | 78           | 0.220                  | 70                    | 50        | 320.0                | 0.080             | 790                          |                          |
| -271KS | 79           | 0.270                  | 70                    | 50        | 270.0                | 0.10              | 700                          |                          |
| -331KS | 80           | 0.330                  | 70                    | 50        | 240.0                | 0.10              | 700                          |                          |
| -391KS | 81           | 0.390                  | 70                    | 50        | 220.0                | 0.10              | 700                          |                          |
| -471KS | 82           | 0.470                  | 70                    | 25        | 190.0                | 0.14              | 590                          |                          |
| -561KS | 83           | 0.560                  | 70                    | 25        | 170.0                | 0.19              | 510                          |                          |
| -681KS | 84           | 0.680                  | 70                    | 25        | 160.0                | 0.26              | 430                          |                          |
| -821KS | 85           | 0.820                  | 75                    | 25        | 150.0                | 0.30              | 400                          |                          |
| -102KS | 86           | 1.00                   | 75                    | 25        | 130.0                | 0.34              | 380                          |                          |
| -122KS | 87           | 1.20                   | 65                    | 7.9       | 120.0                | 0.45              | 330                          |                          |
| -152KS | 88           | 1.50                   | 65                    | 7.9       | 110.0                | 0.57              | 290                          |                          |
| -182KS | 89           | 1.80                   | 65                    | 7.9       | 100.0                | 0.72              | 260                          |                          |
| -222KS | 90           | 2.20                   | 65                    | 7.9       | 80.0                 | 0.90              | 230                          |                          |
| -272KS | 91           | 2.70                   | 65                    | 7.9       | 60.0                 | 1.10              | 210                          |                          |
| -332KS | 92           | 3.30                   | 60                    | 7.9       | 50.0                 | 1.20              | 200                          |                          |
| -392KS | 93           | 3.90                   | 60                    | 7.9       | 45.0                 | 1.40              | 180                          |                          |
| -472KS | 94           | 4.70                   | 60                    | 7.9       | 42.0                 | 1.60              | 170                          |                          |
| -562KS | 95           | 5.60                   | 65                    | 7.9       | 40.0                 | 1.80              | 160                          |                          |
| -682KS | 96           | 6.80                   | 65                    | 7.9       | 37.0                 | 2.40              | 140                          |                          |
| -822KS | 97           | 8.20                   | 65                    | 7.9       | 34.0                 | 3.00              | 130                          |                          |
| -103KS | 98           | 10.0                   | 65                    | 7.9       | 29.0                 | 3.50              | 120                          |                          |
| -123KS | 99           | 12.0                   | 60                    | 2.5       | 27.0                 | 3.60              | 118                          |                          |
| -153KS | 100          | 15.0                   | 60                    | 2.5       | 22.0                 | 3.70              | 115                          |                          |
| -183KS | 101          | 18.0                   | 60                    | 2.5       | 17.0                 | 3.80              | 114                          |                          |
| -223KS | 102          | 22.0                   | 60                    | 2.5       | 16.0                 | 3.90              | 113                          |                          |
| -273KS | 103          | 27.0                   | 65                    | 2.5       | 15.0                 | 4.00              | 110                          |                          |
| -333KS | 104          | 33.0                   | 65                    | 2.5       | 14.0                 | 5.00              | 100                          |                          |
| -393KS | 105          | 39.0                   | 65                    | 2.5       | 13.0                 | 7.00              | 84                           |                          |
| -473KS | 106          | 47.0                   | 70                    | 2.5       | 12.0                 | 8.00              | 79                           |                          |
| -563KS | 107          | 56.0                   | 70                    | 2.5       | 11.0                 | 10.0              | 70                           |                          |
| -683KS | 108          | 68.0                   | 65                    | 2.5       | 10.0                 | 11.0              | 67                           |                          |
| -823KS | 109          | 82.0                   | 60                    | 2.5       | 9.0                  | 12.0              | 64                           |                          |
| -104KS | 110          | 100.0                  | 60                    | 2.5       | 8.0                  | 13.0              | 62                           |                          |
| -124KS | 111          | 120.0                  | 40                    | 0.79      | 7.0                  | 14.0              | 59                           |                          |
| -154KS | 112          | 150.0                  | 40                    | 0.79      | 6.0                  | 16.0              | 56                           |                          |
| -184KS | 113          | 180.0                  | 40                    | 0.79      | 5.0                  | 18.0              | 52                           |                          |
| -224KS | 114          | 220.0                  | 40                    | 0.79      | 4.0                  | 24.0              | 45                           |                          |
| -274KS | 115          | 270.0                  | 40                    | 0.79      | 3.3                  | 25.0              | 44                           |                          |
| -334KS | 116          | 330.0                  | 40                    | 0.79      | 3.1                  | 29.0              | 41                           |                          |
| -394KS | 117          | 390.0                  | 40                    | 0.79      | 2.9                  | 32.0              | 39                           |                          |
| -474KS | 118          | 470.0                  | 35                    | 0.79      | 2.4                  | 35.0              | 37                           |                          |
| -564KS | 119          | 560.0                  | 35                    | 0.79      | 2.1                  | 45.0              | 33                           |                          |
| -684KS | 120          | 680.0                  | 35                    | 0.79      | 1.9                  | 55.0              | 30                           |                          |
| -824KS | 121          | 820.0                  | 30                    | 0.79      | 1.8                  | 70.0              | 26                           |                          |
| -105KS | 122          | 1000.0                 | 30                    | 0.79      | 1.7                  | 80.0              | 25                           |                          |

**Notes** 1) Designed specifically for reflow soldering and other high temperature processes with metalized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) values 270 MHz and above are calculated and for reference only. 3) Optional marking is available.