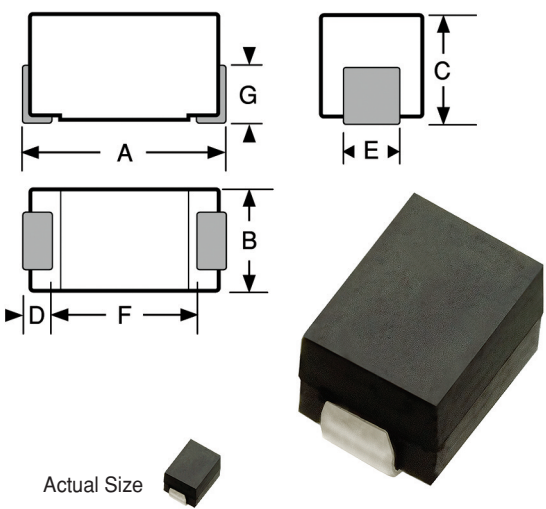


# SERIES

MIL1330



## Unshielded Surface Mount Inductors



**Military QPL Approval**  
 M83446/31 Phenolic Core  
 M83446/32 Iron Core  
 M83446/33 Ferrite Core

† **Ordering Note** Military parts must be ordered to the M83446/ part number

**Physical Parameters**

|   | Inches            | Millimeters      |
|---|-------------------|------------------|
| A | 0.300 to 0.325    | 7.62 to 8.26     |
| B | 0.105 to 0.125    | 2.67 to 3.18     |
| C | 0.125 to 0.145    | 3.18 to 3.68     |
| D | 0.020 Min.        | 0.508 Min.       |
| E | 0.040 to 0.060    | 1.02 to 1.52     |
| F | 0.190 (Ref. only) | 4.83 (Ref. only) |
| G | 0.070 (Ref. only) | 1.78 (Ref. only) |

**Weight Max (Grams)** 0.30

**Operating Temperature Range**

Phenolic: -55°C to +125°C  
 Iron and Ferrite: -55°C to +105°C

**Current Rating at 90°C Ambient**

Phenolic: 35°C Rise  
 Iron and Ferrite: 15°C Rise

**Maximum Power Dissipation at 90°C Ambient**

Phenolic: 0.210 W  
 Iron: 0.090 W  
 Ferrite: 0.073 W

**Marking** Delevan; dash number; date code (YYWWL) followed by M.

Example: MIL1330-42K  
 DELEVAN  
 42  
 1801A M

**Packaging** Tape & reel (16mm): 7" reel, 500 pieces max.; 13" reel, 2200 pieces max.

**Made In the U.S.A.**

| DASH NUMBER* | MIL DASH # | INDUCTANCE (µH) ±10% | TEST FREQUENCY (MHz) | Q MINIMUM | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
|--------------|------------|----------------------|----------------------|-----------|-------------------|------------------------------|-----------------------------|
|--------------|------------|----------------------|----------------------|-----------|-------------------|------------------------------|-----------------------------|

| M83446/31 – SERIES MIL1330 PHENOLIC CORE |     |      |    |      |       |      |      |
|--|-----|------|----|------|-------|------|------|
| -94K                                     | 01F | 0.10 | 40 | 25.0 | 680.0 | 0.08 | 1380 |
| -96K                                     | 02F | 0.12 | 40 | 25.0 | 640.0 | 0.09 | 1300 |
| -00K                                     | 03F | 0.15 | 38 | 25.0 | 600.0 | 0.10 | 1230 |
| -02K                                     | 04F | 0.18 | 35 | 25.0 | 550.0 | 0.12 | 1120 |
| -04K                                     | 05F | 0.22 | 33 | 25.0 | 510.0 | 0.14 | 1040 |
| -06K                                     | 06F | 0.27 | 33 | 25.0 | 430.0 | 0.16 | 975  |
| -08K                                     | 07F | 0.33 | 30 | 25.0 | 410.0 | 0.22 | 830  |
| -10K                                     | 08F | 0.39 | 30 | 25.0 | 365.0 | 0.30 | 710  |
| -12K                                     | 09F | 0.47 | 30 | 25.0 | 330.0 | 0.35 | 660  |
| -14K                                     | 10F | 0.56 | 30 | 25.0 | 300.0 | 0.50 | 550  |
| -16K                                     | 11F | 0.68 | 28 | 25.0 | 275.0 | 0.60 | 500  |
| -18K                                     | 12F | 0.82 | 28 | 25.0 | 250.0 | 0.85 | 420  |
| -20K                                     | 13F | 1.00 | 25 | 25.0 | 230.0 | 1.00 | 390  |

| M83446/32 – SERIES MIL1330 IRON CORE |     |       |    |     |       |      |     |
|--------------------------------------|-----|-------|----|-----|-------|------|-----|
| -22K                                 | 01F | 1.20  | 25 | 7.9 | 150.0 | 0.18 | 620 |
| -24K                                 | 02F | 1.50  | 28 | 7.9 | 140.0 | 0.22 | 560 |
| -26K                                 | 03F | 1.80  | 30 | 7.9 | 125.0 | 0.30 | 480 |
| -28K                                 | 04F | 2.20  | 30 | 7.9 | 115.0 | 0.40 | 415 |
| -30K                                 | 05F | 2.70  | 37 | 7.9 | 100.0 | 0.55 | 355 |
| -32K                                 | 06F | 3.30  | 45 | 7.9 | 90.0  | 0.85 | 285 |
| -34K                                 | 07F | 3.90  | 45 | 7.9 | 80.0  | 1.00 | 263 |
| -36K                                 | 08F | 4.70  | 45 | 7.9 | 75.0  | 1.20 | 239 |
| -38K                                 | 09F | 5.60  | 50 | 7.9 | 65.0  | 1.80 | 195 |
| -40K                                 | 10F | 6.80  | 50 | 7.9 | 60.0  | 2.00 | 185 |
| -42K                                 | 11F | 8.20  | 55 | 7.9 | 55.0  | 2.70 | 160 |
| -44K                                 | 12F | 10.00 | 55 | 7.9 | 50.0  | 3.30 | 144 |
| -46K                                 | 13F | 12.0  | 45 | 2.5 | 40.0  | 2.70 | 160 |
| -48K                                 | 14F | 15.0  | 45 | 2.5 | 35.0  | 2.80 | 157 |
| -50K                                 | 15F | 18.0  | 45 | 2.5 | 30.0  | 3.10 | 149 |
| -52K                                 | 16F | 22.0  | 45 | 2.5 | 25.0  | 3.30 | 144 |
| -54K                                 | 17F | 27.0  | 45 | 2.5 | 20.0  | 3.50 | 140 |

| M83446/33 – SERIES MIL1330 FERRITE CORE |     |        |    |      |      |       |     |
|---|-----|--------|----|------|------|-------|-----|
| -56K                                    | 01F | 33.0   | 35 | 2.5  | 24.0 | 3.40  | 130 |
| -58K                                    | 02F | 39.0   | 35 | 2.5  | 22.0 | 3.60  | 125 |
| -60K                                    | 03F | 47.0   | 35 | 2.5  | 20.0 | 4.50  | 110 |
| -62K                                    | 04F | 56.0   | 35 | 2.5  | 18.0 | 5.70  | 100 |
| -64K                                    | 05F | 68.0   | 35 | 2.5  | 15.0 | 6.70  | 92  |
| -66K                                    | 06F | 82.0   | 35 | 2.5  | 14.0 | 7.30  | 88  |
| -68K                                    | 07F | 100.0  | 35 | 2.5  | 13.0 | 8.00  | 84  |
| -70K                                    | 08F | 120.0  | 30 | 0.79 | 12.0 | 13.00 | 66  |
| -72K                                    | 09F | 150.0  | 30 | 0.79 | 11.0 | 15.00 | 61  |
| -74K                                    | 10F | 180.0  | 30 | 0.79 | 10.0 | 17.00 | 57  |
| -76K                                    | 11F | 220.0  | 30 | 0.79 | 9.0  | 21.00 | 52  |
| -78K                                    | 12F | 270.0  | 30 | 0.79 | 8.0  | 25.00 | 47  |
| -80K                                    | 13F | 330.0  | 30 | 0.79 | 7.0  | 28.00 | 45  |
| -82K                                    | 14F | 390.0  | 30 | 0.79 | 6.5  | 35.00 | 40  |
| -84K                                    | 15F | 470.0  | 30 | 0.79 | 6.0  | 42.00 | 36  |
| -86K                                    | 16F | 560.0  | 30 | 0.79 | 5.0  | 46.00 | 35  |
| -88K                                    | 17F | 680.0  | 30 | 0.79 | 4.2  | 60.00 | 30  |
| -90K                                    | 18F | 820.0  | 30 | 0.79 | 3.8  | 65.00 | 29  |
| -92K                                    | 19F | 1000.0 | 30 | 0.79 | 3.4  | 72.00 | 28  |

Parts listed above are QPL/MIL qualified

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

