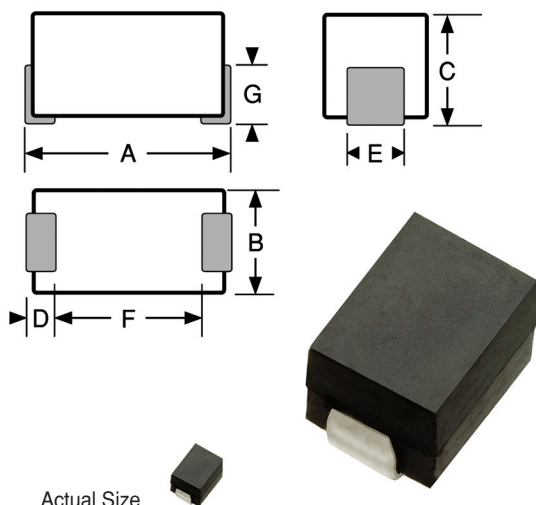


**SERIES****MIL2510****Unshielded Surface Mount Inductors****Military QPL Approval**

M83446/28 Phenolic Core

M83446/29 Iron Core

M83446/30 Ferrite Core

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

**Physical Parameters**

|   | Inches            | Millimeters      |
|---|-------------------|------------------|
| A | 0.235 to 0.255    | 5.97 to 6.48     |
| B | 0.085 to 0.105    | 2.16 to 2.67     |
| C | 0.090 to 0.110    | 2.29 to 2.79     |
| D | 0.060 to 0.080    | 1.52 to 2.03     |
| E | 0.035 to 0.055    | 0.89 to 1.40     |
| F | 0.100 (Ref. only) | 2.54 (Ref. only) |
| G | 0.059 (Ref. only) | 1.47 (Ref. only) |

Dimensions "A" and "C" are over terminals.

**Weight Max.** (Grams)

Phenolic: 0.19

Iron &amp; Ferrite: 0.22

**Operating Temperature Range**

Phenolic: -55°C to +125°C

Iron &amp; Ferrite: -55°C to +105°C

**Current Rating at 90°C Ambient**

Phenolic: 35°C Rise

Iron &amp; Ferrite: 15°C Rise

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

Phenolic: 0.145 W

Iron &amp; Ferrite: 0.062 W

**Marking** API/SMD; inductance with units and tolerance; date code (YYWWL) followed by an M.

Example: MIL2510-26K

API/SMD

1.2uH±10%

0851A M

**Packaging** Tape & reel (12mm): 7" reel, 750 pieces max.; 13" reel, 2700 pieces max.

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

**M83446/28- SERIES MIL 2510 PHENOLIC CORE**

|      |     |      |    |      |       |      |     |
|------|-----|------|----|------|-------|------|-----|
| -00K | 01F | 0.10 | 25 | 25.0 | 640.0 | 0.14 | 865 |
| -02K | 02F | 0.12 | 25 | 25.0 | 610.0 | 0.17 | 785 |
| -04K | 03F | 0.15 | 25 | 25.0 | 530.0 | 0.20 | 725 |
| -06K | 04F | 0.18 | 25 | 25.0 | 510.0 | 0.22 | 690 |
| -08K | 05F | 0.22 | 25 | 25.0 | 480.0 | 0.26 | 635 |
| -10K | 06F | 0.27 | 25 | 25.0 | 440.0 | 0.40 | 510 |
| -12K | 07F | 0.33 | 25 | 25.0 | 410.0 | 0.50 | 455 |
| -14K | 08F | 0.39 | 25 | 25.0 | 380.0 | 0.60 | 415 |
| -16K | 09F | 0.47 | 25 | 25.0 | 340.0 | 0.63 | 405 |

**M83446/29- SERIES MIL 2510 IRON CORE**

|      |     |       |    |      |       |      |     |
|------|-----|-------|----|------|-------|------|-----|
| -18K | 01F | 0.56  | 35 | 25.0 | 240.0 | 0.19 | 500 |
| -20K | 02F | 0.68  | 35 | 25.0 | 210.0 | 0.21 | 475 |
| -22K | 03F | 0.82  | 35 | 25.0 | 200.0 | 0.24 | 444 |
| -24K | 04F | 1.0   | 35 | 7.9  | 180.0 | 0.27 | 418 |
| -26K | 05F | 1.2   | 25 | 7.9  | 160.0 | 0.32 | 385 |
| -28K | 06F | 1.5   | 30 | 7.9  | 140.0 | 0.53 | 300 |
| -30K | 07F | 1.8   | 30 | 7.9  | 125.0 | 0.59 | 283 |
| -32K | 08F | 2.2   | 30 | 7.9  | 120.0 | 0.76 | 250 |
| -34K | 09F | 2.7   | 30 | 7.9  | 100.0 | 0.90 | 229 |
| -36K | 10F | 3.3   | 35 | 7.9  | 90.0  | 1.35 | 187 |
| -38K | 11F | 3.9   | 35 | 7.9  | 85.0  | 1.70 | 167 |
| -40K | 12F | 4.7   | 35 | 7.9  | 80.0  | 2.30 | 143 |
| -42K | 13F | 5.6   | 35 | 7.9  | 75.0  | 3.10 | 123 |
| -44K | 14F | 6.8   | 35 | 7.9  | 64.0  | 3.60 | 114 |
| -46K | 15F | 8.2   | 35 | 7.9  | 50.0  | 4.8  | 99  |
| -48K | 16F | 10.0  | 35 | 7.9  | 45.0  | 5.7  | 91  |
| -50K | 17F | 12.0  | 25 | 2.5  | 29.0  | 3.3  | 120 |
| -52K | 18F | 15.0  | 25 | 2.5  | 24.0  | 3.8  | 110 |
| -54K | 19F | 18.0  | 25 | 2.5  | 21.0  | 4.2  | 106 |
| -56K | 20F | 22.0  | 25 | 2.5  | 18.0  | 4.7  | 100 |
| -58K | 21F | 27.0  | 25 | 2.5  | 17.0  | 5.7  | 91  |
| -60K | 22F | 33.0  | 25 | 2.5  | 15.0  | 6.2  | 87  |
| -62K | 23F | 39.0  | 25 | 2.5  | 13.0  | 8.1  | 76  |
| -64K | 24F | 47.0  | 25 | 2.5  | 12.0  | 9.8  | 69  |
| -66K | 25F | 56.0  | 25 | 2.5  | 11.0  | 12.0 | 62  |
| -68K | 26F | 68.0  | 25 | 2.5  | 10.0  | 13.8 | 58  |
| -70K | 27F | 82.0  | 25 | 2.5  | 9.0   | 19.0 | 50  |
| -72K | 28F | 100.0 | 25 | 2.5  | 8.9   | 21.0 | 47  |

**M83446/30- SERIES MIL 2510 FERRITE CORE**

|      |     |        |    |      |     |       |    |
|------|-----|--------|----|------|-----|-------|----|
| -74K | 01F | 120.0  | 15 | 0.79 | 8.5 | 17.0  | 52 |
| -76K | 02F | 150.0  | 15 | 0.79 | 7.6 | 19.0  | 49 |
| -78K | 03F | 180.0  | 15 | 0.79 | 7.2 | 21.5  | 46 |
| -80K | 04F | 220.0  | 15 | 0.79 | 6.8 | 32.0  | 38 |
| -82K | 05F | 270.0  | 15 | 0.79 | 6.2 | 37.0  | 35 |
| -84K | 06F | 330.0  | 15 | 0.79 | 5.3 | 47.0  | 31 |
| -86K | 07F | 390.0  | 15 | 0.79 | 5.0 | 53.0  | 30 |
| -88K | 08F | 470.0  | 15 | 0.79 | 4.6 | 60.0  | 28 |
| -90K | 09F | 560.0  | 15 | 0.79 | 4.3 | 71.0  | 25 |
| -92K | 10F | 680.0  | 15 | 0.79 | 3.8 | 83.0  | 23 |
| -94K | 11F | 820.0  | 15 | 0.79 | 3.2 | 95.0  | 22 |
| -96K | 12F | 1000.0 | 15 | 0.79 | 2.4 | 108.0 | 20 |

Parts listed above are QPL/MIL qualified

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

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