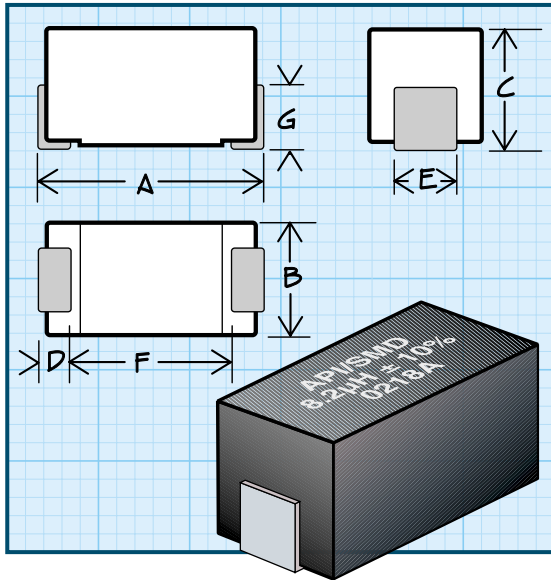


Series 1330

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

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

Made in the U.S.A. Patent Protected

PART NUMBER*

MIL DASH #

INDUCTANCE
(μ H) $\pm 10\%$

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE
MAXIMUM (OHMS)

CURRENT RATING
MAX. (mA)

M83446/31- SERIES 1330 PHENOLIC CORE

| | | | | | | | |
|----------|-----|------|----|------|-------|------|------|
| 1330-94K | 01F | 0.10 | 40 | 25.0 | 680.0 | 0.08 | 1380 |
| 1330-96K | 02F | 0.12 | 40 | 25.0 | 640.0 | 0.09 | 1300 |
| 1330-00K | 03F | 0.15 | 38 | 25.0 | 600.0 | 0.10 | 1230 |
| 1330-02K | 04F | 0.18 | 35 | 25.0 | 550.0 | 0.12 | 1120 |
| 1330-04K | 05F | 0.22 | 33 | 25.0 | 510.0 | 0.14 | 1040 |
| 1330-06K | 06F | 0.27 | 33 | 25.0 | 430.0 | 0.16 | 975 |
| 1330-08K | 07F | 0.33 | 30 | 25.0 | 410.0 | 0.22 | 830 |
| 1330-10K | 08F | 0.39 | 30 | 25.0 | 365.0 | 0.30 | 710 |
| 1330-12K | 09F | 0.47 | 30 | 25.0 | 330.0 | 0.35 | 660 |
| 1330-14K | 10F | 0.56 | 30 | 25.0 | 300.0 | 0.50 | 550 |
| 1330-16K | 11F | 0.68 | 28 | 25.0 | 275.0 | 0.60 | 500 |
| 1330-18K | 12F | 0.82 | 28 | 25.0 | 250.0 | 0.85 | 420 |
| 1330-20K | 13F | 1.00 | 25 | 25.0 | 230.0 | 1.00 | 390 |

M83446/32- SERIES 1330 IRON CORE

| | | | | | | | |
|----------|-----|-------|----|-----|-------|------|-----|
| 1330-22K | 01F | 1.20 | 25 | 7.9 | 150.0 | 0.18 | 620 |
| 1330-24K | 02F | 1.50 | 28 | 7.9 | 140.0 | 0.22 | 560 |
| 1330-26K | 03F | 1.80 | 30 | 7.9 | 125.0 | 0.30 | 480 |
| 1330-28K | 04F | 2.20 | 30 | 7.9 | 115.0 | 0.40 | 415 |
| 1330-30K | 05F | 2.70 | 37 | 7.9 | 100.0 | 0.55 | 355 |
| 1330-32K | 06F | 3.30 | 45 | 7.9 | 90.0 | 0.85 | 285 |
| 1330-34K | 07F | 3.90 | 45 | 7.9 | 80.0 | 1.00 | 263 |
| 1330-36K | 08F | 4.70 | 45 | 7.9 | 75.0 | 1.20 | 239 |
| 1330-38K | 09F | 5.60 | 50 | 7.9 | 65.0 | 1.80 | 195 |
| 1330-40K | 10F | 6.80 | 50 | 7.9 | 60.0 | 2.00 | 185 |
| 1330-42K | 11F | 8.20 | 55 | 7.9 | 55.0 | 2.70 | 160 |
| 1330-44K | 12F | 10.00 | 55 | 7.9 | 50.0 | 3.30 | 144 |
| 1330-46K | 13F | 12.0 | 45 | 2.5 | 40.0 | 2.70 | 160 |
| 1330-48K | 14F | 15.0 | 45 | 2.5 | 35.0 | 2.80 | 157 |
| 1330-50K | 15F | 18.0 | 45 | 2.5 | 30.0 | 3.10 | 149 |
| 1330-52K | 16F | 22.0 | 45 | 2.5 | 25.0 | 3.30 | 144 |
| 1330-54K | 17F | 27.0 | 45 | 2.5 | 20.0 | 3.50 | 140 |

M83446/33- SERIES 1330 FERRITE CORE

| | | | | | | | |
|----------|-----|--------|----|------|------|-------|-----|
| 1330-56K | 01F | 33.0 | 35 | 2.5 | 24.0 | 3.40 | 130 |
| 1330-58K | 02F | 39.0 | 35 | 2.5 | 22.0 | 3.60 | 125 |
| 1330-60K | 03F | 47.0 | 35 | 2.5 | 20.0 | 4.50 | 110 |
| 1330-62K | 04F | 56.0 | 35 | 2.5 | 18.0 | 5.70 | 100 |
| 1330-64K | 05F | 68.0 | 35 | 2.5 | 15.0 | 6.70 | 92 |
| 1330-66K | 06F | 82.0 | 35 | 2.5 | 14.0 | 7.30 | 88 |
| 1330-68K | 07F | 100.0 | 35 | 2.5 | 13.0 | 8.00 | 84 |
| 1330-70K | 08F | 120.0 | 30 | 0.79 | 12.0 | 13.00 | 66 |
| 1330-72K | 09F | 150.0 | 30 | 0.79 | 11.0 | 15.00 | 61 |
| 1330-74K | 10F | 180.0 | 30 | 0.79 | 10.0 | 17.00 | 57 |
| 1330-76K | 11F | 220.0 | 30 | 0.79 | 9.0 | 21.00 | 52 |
| 1330-78K | 12F | 270.0 | 30 | 0.79 | 8.0 | 25.00 | 47 |
| 1330-80K | 13F | 330.0 | 30 | 0.79 | 7.0 | 28.00 | 45 |
| 1330-82K | 14F | 390.0 | 30 | 0.79 | 6.5 | 35.00 | 40 |
| 1330-84K | 15F | 470.0 | 30 | 0.79 | 6.0 | 42.00 | 36 |
| 1330-86K | 16F | 560.0 | 30 | 0.79 | 5.0 | 46.00 | 35 |
| 1330-88K | 17F | 680.0 | 30 | 0.79 | 4.2 | 60.00 | 30 |
| 1330-90K | 18F | 820.0 | 30 | 0.79 | 3.8 | 65.00 | 29 |
| 1330-92K | 19F | 1000.0 | 30 | 0.79 | 3.4 | 72.00 | 28 |

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%