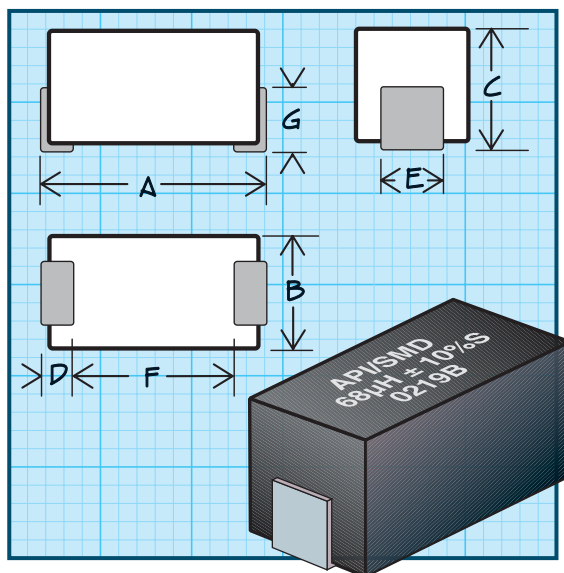


## Shielded Surface Mount Inductors



## Military QPL Approval

M83446/34 Iron Core/Iron Sleeve

M83446/34 Iron Core/Ferrite Sleeve

M83446/35 Ferrite Core/Ferrite Sleeve

† **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) |

Dimensions "A" and "C" are over terminations

Weight Max (Grams) 0.30

Operating Temperature Range -55°C to +105°C

Current Rating at 90°C Ambient 15°C Rise

Maximum Power Dissipation at 90°C 0.0585 Watts

**Incremental Current** Current level which causes a maximum of 5% decrease in inductance.

Coupling 3% Max.

**\*\*Note** Self Resonant Frequency (SRF) values for -101K to -331K are calculated and for reference only.

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

Made In the U.S.A. Patent Protected

DASH NUMBER\*

MIL DASH #

INDUCTANCE  
(µH) ±10%

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)\*\*

DC RESISTANCE  
MAXIMUM (OHMS)CURRENT RATING  
MAXIMUM (mA)INCREMENTAL  
CURRENT (mA)

## M83446/34-SERIES MIL1331 IRON CORE &amp; SLEEVE

|       |     |      |    |      |         |      |     |     |
|-------|-----|------|----|------|---------|------|-----|-----|
| -101K | 01F | 0.10 | 45 | 25.0 | 490.0** | 0.10 | 670 | 670 |
| -121K | 02F | 0.12 | 45 | 25.0 | 430.0** | 0.11 | 635 | 635 |
| -151K | 03F | 0.15 | 45 | 25.0 | 415.0** | 0.12 | 610 | 610 |
| -181K | 04F | 0.18 | 45 | 25.0 | 375.0** | 0.13 | 585 | 585 |
| -221K | 05F | 0.22 | 45 | 25.0 | 330.0** | 0.15 | 545 | 545 |
| -271K | 06F | 0.27 | 45 | 25.0 | 300.0** | 0.16 | 530 | 530 |
| -331K | 07F | 0.33 | 44 | 25.0 | 260.0** | 0.18 | 495 | 495 |
| -391K | 08F | 0.39 | 42 | 25.0 | 230.0   | 0.19 | 485 | 485 |
| -471K | 09F | 0.47 | 41 | 25.0 | 220.0   | 0.21 | 460 | 460 |
| -561K | 10F | 0.56 | 41 | 25.0 | 210.0   | 0.23 | 440 | 440 |
| -681K | 11F | 0.68 | 39 | 25.0 | 180.0   | 0.24 | 430 | 430 |
| -821K | 12F | 0.82 | 38 | 25.0 | 165.0   | 0.27 | 405 | 405 |
| -102K | 13F | 1.00 | 37 | 25.0 | 150.0   | 0.30 | 385 | 385 |
| -122K | 14F | 1.20 | 40 | 7.9  | 130.0   | 0.73 | 247 | 247 |
| -152K | 15F | 1.50 | 41 | 7.9  | 115.0   | 0.86 | 228 | 228 |
| -182K | 16F | 1.80 | 43 | 7.9  | 105.0   | 0.95 | 217 | 217 |
| -222K | 17F | 2.20 | 45 | 7.9  | 95.0    | 1.10 | 202 | 202 |
| -272K | 18F | 2.70 | 48 | 7.9  | 90.0    | 1.20 | 193 | 193 |
| -332K | 19F | 3.30 | 49 | 7.9  | 80.0    | 1.30 | 185 | 185 |
| -392K | 20F | 3.90 | 50 | 7.9  | 75.0    | 1.50 | 173 | 173 |
| -472K | 21F | 4.70 | 50 | 7.9  | 70.0    | 2.40 | 136 | 136 |
| -562K | 22F | 5.60 | 50 | 7.9  | 60.0    | 2.90 | 124 | 124 |
| -682K | 23F | 6.80 | 50 | 7.9  | 55.0    | 3.20 | 118 | 118 |
| -822K | 24F | 8.20 | 50 | 7.9  | 53.0    | 3.60 | 111 | 111 |
| -103K | 25F | 10.0 | 50 | 7.9  | 50.0    | 4.00 | 106 | 106 |

## M83446/34-SERIES MIL1331 IRON CORE FERRITE SLEEVE

|       |     |       |    |     |      |      |     |     |
|-------|-----|-------|----|-----|------|------|-----|-----|
| -123K | 26F | 12.0  | 36 | 2.5 | 35.0 | 3.00 | 122 | 122 |
| -153K | 27F | 15.0  | 38 | 2.5 | 30.0 | 3.40 | 115 | 115 |
| -183K | 28F | 18.0  | 40 | 2.5 | 26.0 | 3.80 | 108 | 108 |
| -223K | 29F | 22.0  | 40 | 2.5 | 24.0 | 4.90 | 96  | 96  |
| -273K | 30F | 27.0  | 40 | 2.5 | 21.0 | 5.80 | 88  | 88  |
| -333K | 31F | 33.0  | 41 | 2.5 | 20.0 | 6.50 | 83  | 83  |
| -393K | 32F | 39.0  | 42 | 2.5 | 19.0 | 7.90 | 75  | 75  |
| -473K | 33F | 47.0  | 44 | 2.5 | 16.0 | 9.30 | 69  | 69  |
| -563K | 34F | 56.0  | 44 | 2.5 | 15.0 | 11.0 | 64  | 64  |
| -683K | 35F | 68.0  | 45 | 2.5 | 13.0 | 12.0 | 61  | 61  |
| -823K | 36F | 82.0  | 45 | 2.5 | 11.0 | 13.0 | 59  | 59  |
| -104K | 37F | 100.0 | 40 | 2.5 | 10.5 | 16.8 | 51  | 51  |

## M83446/35-SERIES MIL1331 FERRITE CORE &amp; SLEEVE

|       |     |       |    |      |      |      |    |    |
|-------|-----|-------|----|------|------|------|----|----|
| -124K | 01F | 120.0 | 31 | 0.79 | 13.0 | 5.80 | 88 | 27 |
| -154K | 02F | 150.0 | 33 | 0.79 | 12.0 | 7.90 | 75 | 24 |
| -184K | 03F | 180.0 | 33 | 0.79 | 11.0 | 9.40 | 69 | 22 |
| -224K | 04F | 220.0 | 35 | 0.79 | 10.0 | 11.0 | 64 | 20 |
| -274K | 05F | 270.0 | 35 | 0.79 | 9.0  | 12.0 | 61 | 18 |
| -334K | 06F | 330.0 | 35 | 0.79 | 8.0  | 16.0 | 53 | 16 |
| -394K | 07F | 390.0 | 35 | 0.79 | 7.8  | 21.0 | 46 | 14 |
| -474K | 08F | 470.0 | 35 | 0.79 | 7.5  | 24.0 | 43 | 13 |
| -564K | 09F | 560.0 | 35 | 0.79 | 7.0  | 28.0 | 40 | 12 |

Parts listed above are QPL/MIL qualified

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

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