

## MLRF1010

**Epoxy Coated, MIL-PRF-83446**



M83446/4 Phenolic Core & Ferrite Core



| PART<br>NUMBER (1)     | MIL<br>DASH<br>NUMBERS ** | L<br>μH | Q<br>MIN | TEST<br>FREQ<br>MHZ | SRF<br>MHz<br>MIN (2) | DCR<br>OHMS<br>MAX | CURRENT<br>RATING<br>mA DC MAX (3) |
|------------------------|---------------------------|---------|----------|---------------------|-----------------------|--------------------|------------------------------------|
| M83446/4 PHENOLIC CORE |                           |         |          |                     |                       |                    |                                    |
| MLRF1010-010*          | 30/37                     | 0.010   | 60       | 50                  | 2700                  | 0.060              | 1270                               |
| MLRF1010-012K          | 38                        | 0.012   | 57       | 50                  | 2450                  | 0.069              | 1190                               |
| MLRF1010-015*          | 31/39                     | 0.015   | 55       | 50                  | 2200                  | 0.078              | 1110                               |
| MLRF1010-018K          | 40                        | 0.018   | 52       | 50                  | 2000                  | 0.093              | 1030                               |
| MLRF1010-022*          | 32/41                     | 0.022   | 50       | 50                  | 1800                  | 0.108              | 950                                |
| MLRF1010-027K          | 42                        | 0.027   | 49       | 50                  | 1625                  | 0.114              | 925                                |
| MLRF1010-033*          | 33/43                     | 0.033   | 48       | 50                  | 1450                  | 0.120              | 900                                |
| MLRF1010-039K          | 44                        | 0.039   | 45       | 50                  | 1335                  | 0.133              | 860                                |
| MLRF1010-047*          | 34/45                     | 0.047   | 42       | 50                  | 1220                  | 0.145              | 820                                |
| MLRF1010-056K          | 46                        | 0.056   | 39       | 50                  | 1110                  | 0.170              | 760                                |
| MLRF1010-068*          | 35/47                     | 0.068   | 36       | 50                  | 1000                  | 0.195              | 705                                |
| MLRF1010-082K          | 48                        | 0.082   | 34       | 50                  | 915                   | 0.212              | 675                                |
| MLRF1010-100*          | 36/49                     | 0.100   | 32       | 50                  | 830                   | 0.230              | 650                                |

\*Suffix "K" for 10% tolerance, Suffix "M" for 20% tolerance

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\*\* Where there are 2 MIL DASH NUMBERS, the first is 20% tolerance and the second is 10% tolerance

(1) Add suffix letter "S" to order with tin/lead solder termination, otherwise gold termination will be provided

(2) SRF values above 250 MHz are calculated and are for reference only

(3) These values are also the maximum incremental current for ferrites only. Incremental current will not change the inductance more than 5% from the zero DC inductance measurement

### NOTES:

- Operating Temperature Range:  
-55°C to +125°C
- Current Rating is based on a 35°C temperature rise at an ambient temperature of 90°C
- DWV 200 Vrms @ Sea Level  
80 Vrms @ 70,000 Feet
- Weight maximum 0.50 grams (0.017637 ounces)

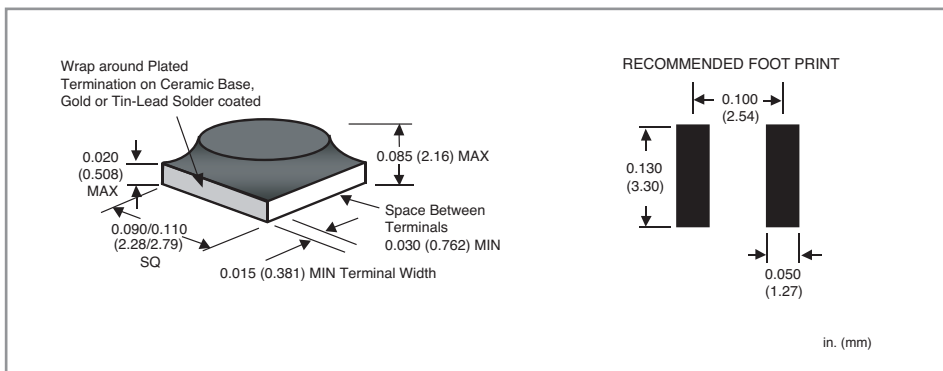
Gold termination is code "A" finish of MIL-PRF-83446

Tin-Lead solder termination is code "B" or "F" finish of MIL-PRF-83446

Example of ordering by Military number for  
MLRF1010-220K: M83446/4-04A  
MLRF1010-220KS: M83446/4-04B

### TAPE AND REEL SPECS:

|                      |       |
|----------------------|-------|
| Pcs./Reel maximum:   | 2000  |
| Pitch between parts: | 4 mm  |
| Tape width:          | 12 mm |
| Reel diameter:       | 7 in. |



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| PART NUMBER (1)       | MIL DASH NUMBERS ** | L $\mu$ H | Q MIN | TEST FREQ MHz | SRF MHz MIN (2) | DCR OHMS MAX | CURRENT RATING mA DC MAX (3) |
|-----------------------|---------------------|-----------|-------|---------------|-----------------|--------------|------------------------------|
| M83446/4 FERRITE CORE |                     |           |       |               |                 |              |                              |
| MLRF1010-120K         | 01                  | 0.120     | 30    | 25            | 750             | 0.125        | 880                          |
| MLRF1010-150K         | 02                  | 0.150     | 25    | 25            | 650             | 0.175        | 745                          |
| MLRF1010-180K         | 03                  | 0.180     | 25    | 25            | 550             | 0.200        | 695                          |
| MLRF1010-220K         | 04                  | 0.220     | 25    | 25            | 450             | 0.220        | 665                          |
| MLRF1010-270K         | 05                  | 0.270     | 25    | 25            | 375             | 0.230        | 650                          |
| MLRF1010-330K         | 06                  | 0.330     | 25    | 25            | 300             | 0.235        | 645                          |
| MLRF1010-390K         | 07                  | 0.390     | 22    | 25            | 235             | 0.240        | 635                          |
| MLRF1010-470K         | 08                  | 0.470     | 22    | 25            | 215             | 0.260        | 610                          |
| MLRF1010-560K         | 09                  | 0.560     | 22    | 25            | 195             | 0.278        | 590                          |
| MLRF1010-680K         | 10                  | 0.680     | 22    | 25            | 175             | 0.520        | 435                          |
| MLRF1010-820K         | 11                  | 0.820     | 22    | 25            | 160             | 0.530        | 430                          |
| MLRF1010-101K         | 12                  | 1.0       | 22    | 25            | 145             | 0.540        | 425                          |
| MLRF1010-121K         | 13                  | 1.2       | 22    | 7.9           | 130             | 0.740        | 360                          |
| MLRF1010-151K         | 14                  | 1.5       | 22    | 7.9           | 115             | 0.840        | 340                          |
| MLRF1010-181K         | 15                  | 1.8       | 22    | 7.9           | 105             | 0.920        | 325                          |
| MLRF1010-221K         | 16                  | 2.2       | 22    | 7.9           | 85              | 1.00         | 310                          |
| MLRF1010-271K         | 17                  | 2.7       | 24    | 7.9           | 77              | 1.15         | 290                          |
| MLRF1010-331K         | 18                  | 3.3       | 24    | 7.9           | 70              | 1.40         | 260                          |
| MLRF1010-391K         | 19                  | 3.9       | 24    | 7.9           | 68              | 1.55         | 250                          |
| MLRF1010-471K         | 20                  | 4.7       | 24    | 7.9           | 60              | 1.80         | 230                          |
| MLRF1010-561K         | 21                  | 5.6       | 22    | 7.9           | 55              | 2.00         | 220                          |
| MLRF1010-681K         | 22                  | 6.8       | 22    | 7.9           | 50              | 2.20         | 210                          |
| MLRF1010-821K         | 23                  | 8.2       | 22    | 7.9           | 48              | 2.50         | 195                          |
| MLRF1010-102K         | 24                  | 10        | 24    | 7.9           | 40              | 3.45         | 165                          |
| MLRF1010-122K         | 25                  | 12        | 25    | 2.5           | 35              | 3.80         | 160                          |
| MLRF1010-152K         | 26                  | 15        | 25    | 2.5           | 30              | 5.60         | 135                          |
| MLRF1010-182K         | 27                  | 18        | 25    | 2.5           | 28              | 5.80         | 130                          |
| MLRF1010-222K         | 28                  | 22        | 25    | 2.5           | 25              | 6.40         | 125                          |
| MLRF1010-272K         | 29                  | 27        | 25    | 2.5           | 22              | 6.90         | 120                          |

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