



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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## RF Coated Chokes (Axial Leads)—1205 series

### A. Electrical Specifications:

| Part Number | Inductance (μH) | Q Min. | Test Freq. (MHz) | SRF Min. (MHz) | DCR (OHM) Max. | Rated Current (mA) Max. |
|-------------|-----------------|--------|------------------|----------------|----------------|-------------------------|
| 1205R10M    | 0.10            | 35     | 25               | 380            | 0.075          | 1150                    |
| 1205R12M    | 0.12            | 35     | 25               | 380            | 0.075          | 1150                    |
| 1205R15M    | 0.15            | 35     | 25               | 380            | 0.075          | 1150                    |
| 1205R18M    | 0.18            | 35     | 25               | 380            | 0.075          | 1150                    |
| 1205R22M    | 0.22            | 35     | 25               | 380            | 0.075          | 1150                    |
| 1205R27M    | 0.27            | 35     | 25               | 360            | 0.08           | 1110                    |
| 1205R33M    | 0.33            | 35     | 25               | 350            | 0.08           | 1110                    |
| 1205R39M    | 0.39            | 35     | 25               | 320            | 0.09           | 1000                    |
| 1205R47M    | 0.47            | 40     | 25               | 300            | 0.10           | 1000                    |
| 1205R56M    | 0.56            | 40     | 25               | 280            | 0.11           | 950                     |
| 1205R68M    | 0.68            | 40     | 25               | 250            | 0.12           | 900                     |
| 1205R82M    | 0.82            | 40     | 25               | 200            | 0.12           | 900                     |
| 12051R0K    | 1.0             | 50     | 25               | 180            | 0.15           | 815                     |
| 12051R2K    | 1.2             | 50     | 7.9              | 165            | 0.18           | 740                     |
| 12051R5K    | 1.5             | 50     | 7.9              | 150            | 0.20           | 700                     |
| 12051R8K    | 1.8             | 50     | 7.9              | 125            | 0.23           | 655                     |
| 12052R2K    | 2.2             | 50     | 7.9              | 110            | 0.25           | 630                     |
| 12052R7K    | 2.7             | 50     | 7.9              | 95             | 0.28           | 595                     |
| 12053R3K    | 3.3             | 50     | 7.9              | 70             | 0.30           | 575                     |
| 12053R9K    | 3.9             | 50     | 7.9              | 65             | 0.32           | 555                     |
| 12054R7K    | 4.7             | 50     | 7.9              | 50             | 0.35           | 530                     |
| 12055R6K    | 5.6             | 50     | 7.9              | 40             | 0.40           | 500                     |
| 12056R8K    | 6.8             | 50     | 7.9              | 30             | 0.45           | 470                     |
| 12058R2K    | 8.2             | 50     | 7.9              | 28             | 0.55           | 425                     |
| 1205100K    | 10              | 50     | 7.9              | 22             | 0.72           | 370                     |
| 1205120K    | 12              | 50     | 2.5              | 20             | 0.80           | 350                     |
| 1205150K    | 15              | 50     | 2.5              | 16             | 0.88           | 335                     |
| 1205180K    | 18              | 50     | 2.5              | 15             | 1.0            | 315                     |
| 1205220K    | 22              | 50     | 2.5              | 13             | 1.2            | 285                     |
| 1205270K    | 27              | 50     | 2.5              | 11             | 1.35           | 270                     |
| 1205330K    | 33              | 50     | 2.5              | 10             | 1.5            | 255                     |
| 1205390K    | 39              | 50     | 2.5              | 9.5            | 1.7            | 240                     |
| 1205470K    | 47              | 50     | 2.5              | 8.5            | 2.3            | 205                     |
| 1205560K    | 56              | 50     | 2.5              | 7.5            | 2.6            | 195                     |
| 1205680K    | 68              | 50     | 2.5              | 6.5            | 2.9            | 185                     |
| 1205820K    | 82              | 50     | 2.5              | 6.0            | 3.2            | 175                     |
| 1205101K    | 100             | 50     | 2.5              | 5.5            | 3.5            | 165                     |
| 1205121K    | 120             | 50     | 0.79             | 5.4            | 3.8            | 160                     |
| 1205151K    | 150             | 50     | 0.79             | 4.75           | 4.4            | 150                     |
| 1205181K    | 180             | 50     | 0.79             | 4.35           | 5.0            | 140                     |
| 1205221K    | 220             | 50     | 0.79             | 4.0            | 5.7            | 130                     |
| 1205271K    | 270             | 50     | 0.79             | 3.7            | 6.5            | 120                     |
| 1205331K    | 330             | 50     | 0.79             | 3.4            | 9.5            | 100                     |
| 1205391K    | 390             | 50     | 0.79             | 2.8            | 10.5           | 95                      |
| 1205471K    | 470             | 50     | 0.79             | 2.55           | 11.6           | 90                      |
| 1205561K    | 560             | 50     | 0.79             | 2.35           | 13             | 85                      |
| 1205681K    | 680             | 50     | 0.79             | 2.0            | 18             | 75                      |
| 1205821K    | 820             | 50     | 0.79             | 1.5            | 23             | 65                      |
| 1205102K    | 1000            | 50     | 0.79             | 1.2            | 26             | 60                      |

Note: **RoHS** compliant; for the **ROHS** parts, we add “-LFR” at the end of the P/N.



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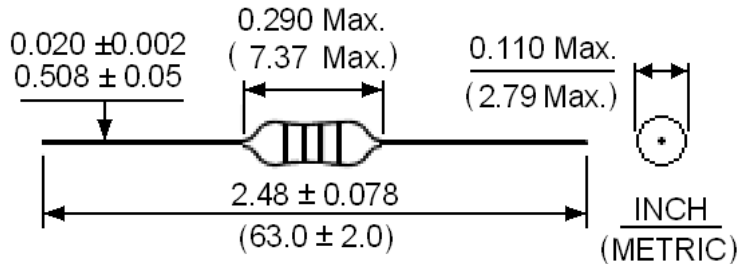
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## RF Coated Chokes (Axial Leads)—1205 series

### B. Mechanical Dimensions:



Mechanical drawing

### C. General Information:

1. Coil Form Material: Ferrite
2. Body Size: 7.37 x 2.79 mm
3. Inductance (Current) ranges: 0.10uH (1.15A) - 1000uH (60mA)
4. Inductance Tolerance: M:±20%, K: ±10%, J:±5%.
5. DCR: from 0.075 - 26.0 Ohms.
6. Other information:

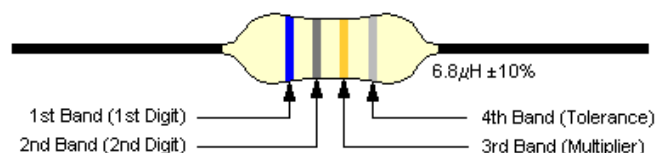
| Spec. / Series           | 1201 to 1211 Series  | 1310 to 1501 Series                            |
|--------------------------|--|--|
| Operating Temperature:   | - 20°X to + 80°X   | Phenolic: 125°X Max.<br>Ferrite: 105°X Max.    |
| Temp. Rise:              | 20°X   | Phenolic: 35°X Max.<br>Ferrite: 15°X Max.      |
| Ambient Temperature:     | 90°X Max.  |  |
| Terminal Strength:       | 3 lb.  |  |
| Marking:                 | Color Code<br>in accordance with EIA   | Color Code<br>in accordance with MIL-C-15305 D |
| Moisture & Heat Resist.: | $\Delta L/L \leq \pm 5\%$<br>$\Delta Q/Q \leq \pm 10\%$                        |  |
| Dielectric Strength:     | 1KV rms.   |  |
| Test Equipment:          | L & Q = HP4342A at specified frequency<br>DCR = Milli-Ohm meter, SRF = HP4191A |  |

### 7. Color Code for RF Coated Chokes:

| Color      | Black | Brown | Red | Orange | Yellow | Green | Blue | Violet | Gray | White | Gold | Silver | None |
|------------|-------|-------|-----|--------|--------|-------|------|--------|------|-------|------|--------|------|
| Digit      | 0     | 1     | 2   | 3      | 4      | 5     | 6    | 7      | 8    | 9     | --   | --     | --   |
| Multiplier | 1     | 10    | 100 | 1000   | 10,000 | --    | --   | --     | --   | --    | 0.1  | 0.01   | --   |
| Tolerance  | --    | --    | --  | 3%     | --     | --    | --   | --     | --   | --    | 5%   | 10%    | 20%  |

Example for color code on Molded Inductor:

| Inductance (µH) | 1st Band | 2nd Band | 3rd Band | 4th Band |
|-----------------|----------|----------|----------|----------|
| 0.68 ± 10%      | Blue     | Gray     | Silver   | Silver   |
| 6.8 ± 10%       | Blue     | Gray     | Gold     | Silver   |
| 68 ± 10%        | Blue     | Gray     | Black    | Silver   |



### Color Code

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