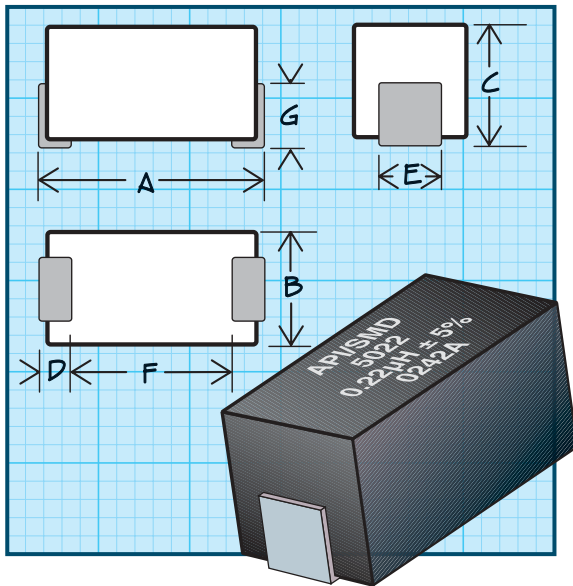


# Series 5022

## Surface Mountable Inductors



### Physical Parameters

|   | Inches            | Millimeters      |
|---|-------------------|------------------|
| A | 0.490 to 0.520    | 12.44 to 13.21   |
| B | 0.230 to 0.250    | 5.84 to 6.35     |
| C | 0.210 to 0.230    | 5.33 to 5.84     |
| D | 0.050 Min.        | 1.27 Min.        |
| E | 0.055 to 0.095    | 1.397 to 2.413   |
| F | 0.330 (Ref. only) | 8.38 (Ref. only) |
| G | 0.120 (Ref. only) | 3.04 (Ref. only) |

**Weight Max.** (Grams) 1.5

**Mechanical Configuration** Units are encapsulated in an epoxy molded surface mount package.

**Operating Temperature Range** -55°C to +125°C

**Current Rating at 90°C Ambient** 35°C Rise

**Maximum Power Dissipation at 90°C** 0.405 W

**Packaging** Tape & reel (24mm): 13" reel, 800 pieces max.; 7" reel not available

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

| SERIES 5022 PHENOLIC CORE |                                   |           |                      |                   |                                 |                             |
|---------------------------|-----------------------------------|-----------|----------------------|-------------------|---------------------------------|-----------------------------|
| PART NUMBER               | INDUCTANCE<br>( $\mu$ H) $\pm$ 5% | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE<br>MAXIMUM (OHMS) | CURRENT RATING<br>MAX. (mA) |
| 5022-151J                 | 0.15                              | 50        | 25.0                 | 525               | 0.030                           | 3500                        |
| 5022-161J                 | 0.16                              | 50        | 25.0                 | 525               | 0.040                           | 3025                        |
| 5022-181J                 | 0.18                              | 50        | 25.0                 | 500               | 0.043                           | 2915                        |
| 5022-201J                 | 0.20                              | 50        | 25.0                 | 475               | 0.047                           | 2790                        |
| 5022-221J                 | 0.22                              | 50        | 25.0                 | 450               | 0.055                           | 2580                        |
| 5022-241J                 | 0.24                              | 45        | 25.0                 | 415               | 0.060                           | 2470                        |
| 5022-271J                 | 0.27                              | 45        | 25.0                 | 400               | 0.070                           | 2285                        |
| 5022-301J                 | 0.30                              | 45        | 25.0                 | 380               | 0.080                           | 2140                        |
| 5022-331J                 | 0.33                              | 45        | 25.0                 | 360               | 0.090                           | 2015                        |
| 5022-361J                 | 0.36                              | 45        | 25.0                 | 345               | 0.098                           | 1935                        |
| 5022-391J                 | 0.39                              | 45        | 25.0                 | 330               | 0.100                           | 1915                        |
| 5022-431J                 | 0.43                              | 45        | 25.0                 | 315               | 0.110                           | 1825                        |
| 5022-471J                 | 0.47                              | 45        | 25.0                 | 310               | 0.120                           | 1750                        |
| 5022-511J                 | 0.51                              | 45        | 25.0                 | 300               | 0.130                           | 1680                        |
| 5022-561J                 | 0.56                              | 50        | 25.0                 | 280               | 0.135                           | 1645                        |
| 5022-621J                 | 0.62                              | 50        | 25.0                 | 260               | 0.140                           | 1615                        |
| 5022-681J                 | 0.68                              | 50        | 25.0                 | 250               | 0.150                           | 1555                        |
| 5022-751J                 | 0.75                              | 50        | 25.0                 | 230               | 0.180                           | 1425                        |
| 5022-821J                 | 0.82                              | 50        | 25.0                 | 220               | 0.220                           | 1300                        |
| 5022-911J                 | 0.91                              | 50        | 25.0                 | 210               | 0.240                           | 1240                        |
| 5022-102J                 | 1.00                              | 50        | 25.0                 | 200               | 0.290                           | 1125                        |
| 5022-112J                 | 1.10                              | 33        | 7.9                  | 190               | 0.420                           | 930                         |
| 5022-122J                 | 1.20                              | 33        | 7.9                  | 180               | 0.420                           | 930                         |
| 5022-132J                 | 1.30                              | 33        | 7.9                  | 170               | 0.480                           | 875                         |
| 5022-152J                 | 1.50                              | 33        | 7.9                  | 160               | 0.500                           | 855                         |
| 5022-162J                 | 1.60                              | 33        | 7.9                  | 155               | 0.600                           | 780                         |
| 5022-182J                 | 1.80                              | 33        | 7.9                  | 150               | 0.650                           | 755                         |
| 5022-202J                 | 2.00                              | 33        | 7.9                  | 140               | 0.800                           | 675                         |
| 5022-222J                 | 2.20                              | 33        | 7.9                  | 135               | 0.950                           | 620                         |
| 5022-242J                 | 2.40                              | 33        | 7.9                  | 130               | 1.100                           | 575                         |
| 5022-272J                 | 2.70                              | 33        | 7.9                  | 120               | 1.200                           | 550                         |
| 5022-302J                 | 3.00                              | 33        | 7.9                  | 115               | 1.800                           | 455                         |
| 5022-332J                 | 3.30                              | 33        | 7.9                  | 110               | 2.000                           | 430                         |
| 5022-362J                 | 3.60                              | 33        | 7.9                  | 105               | 2.150                           | 415                         |
| 5022-392J                 | 3.90                              | 33        | 7.9                  | 100               | 2.300                           | 395                         |
| 5022-432J                 | 4.30                              | 33        | 7.9                  | 95                | 2.400                           | 390                         |
| 5022-472J                 | 4.70                              | 33        | 7.9                  | 90                | 2.600                           | 375                         |

**Optional Tolerances:** H = 3% G = 2% F = 1%

# Series 5022

## Surface Mountable Inductors

| PART NUMBER                         | INDUCTANCE<br>( $\mu$ H) $\pm$ 5% | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE<br>MAXIMUM (OHMS) | CURRENT RATING<br>MAX. (mA) |
|-------------------------------------|-----------------------------------|-----------|----------------------|-------------------|---------------------------------|-----------------------------|
| SERIES 5022 IRON CORE               |                                   |           |                      |                   |                                 |                             |
| 5022-512J                           | 5.10                              | 35        | 7.9                  | 65                | 0.300                           | 1040                        |
| 5022-562J                           | 5.60                              | 45        | 7.9                  | 60                | 0.320                           | 1030                        |
| 5022-622J                           | 6.20                              | 45        | 7.9                  | 60                | 0.470                           | 830                         |
| 5022-682J                           | 6.80                              | 50        | 7.9                  | 55                | 0.500                           | 820                         |
| 5022-752J                           | 7.50                              | 50        | 7.9                  | 55                | 0.550                           | 765                         |
| 5022-822J                           | 8.20                              | 50        | 7.9                  | 50                | 0.600                           | 748                         |
| 5022-912J                           | 9.10                              | 55        | 7.9                  | 50                | 0.800                           | 638                         |
| 5022-103J                           | 10.0                              | 55        | 7.9                  | 45                | 0.900                           | 610                         |
| 5022-113J                           | 11.0                              | 60        | 2.5                  | 44                | 1.050                           | 565                         |
| 5022-123J                           | 12.0                              | 65        | 2.5                  | 42                | 1.100                           | 555                         |
| 5022-133J                           | 13.0                              | 65        | 2.5                  | 40                | 1.200                           | 520                         |
| 5022-153J                           | 15.0                              | 65        | 2.5                  | 40                | 1.400                           | 495                         |
| 5022-163J                           | 16.0                              | 70        | 2.5                  | 38                | 1.800                           | 420                         |
| 5022-183J                           | 18.0                              | 75        | 2.5                  | 34                | 2.250                           | 388                         |
| 5022-203J                           | 20.0                              | 75        | 2.5                  | 30                | 2.500                           | 372                         |
| 5022-223J                           | 22.0                              | 75        | 2.5                  | 30                | 2.500                           | 368                         |
| 5022-243J                           | 24.0                              | 60        | 2.5                  | 26                | 2.500                           | 368                         |
| 5022-273J                           | 27.0                              | 60        | 2.5                  | 25                | 2.600                           | 360                         |
| 5022-303J                           | 30.0                              | 65        | 2.5                  | 21                | 2.800                           | 348                         |
| 5022-333J                           | 33.0                              | 65        | 2.5                  | 19                | 3.000                           | 337                         |
| 5022-363J                           | 36.0                              | 60        | 2.5                  | 15.5              | 2.500                           | 368                         |
| 5022-393J                           | 39.0                              | 60        | 2.5                  | 14.5              | 2.600                           | 361                         |
| 5022-433J                           | 43.0                              | 60        | 2.5                  | 13.7              | 2.700                           | 353                         |
| 5022-473J                           | 47.0                              | 55        | 2.5                  | 13.0              | 2.750                           | 351                         |
| 5022-513J                           | 51.0                              | 55        | 2.5                  | 12.7              | 2.850                           | 344                         |
| 5022-563J                           | 56.0                              | 55        | 2.5                  | 12.0              | 3.000                           | 335                         |
| 5022-623J                           | 62.0                              | 55        | 2.5                  | 11.5              | 3.150                           | 328                         |
| 5022-683J                           | 68.0                              | 55        | 2.5                  | 11.0              | 3.300                           | 320                         |
| 5022-753J                           | 75.0                              | 55        | 2.5                  | 10.5              | 3.700                           | 302                         |
| 5022-823J                           | 82.0                              | 50        | 2.5                  | 10.3              | 3.900                           | 295                         |
| 5022-913J                           | 91.0                              | 50        | 2.5                  | 10.0              | 4.300                           | 280                         |
| 5022-104J                           | 100.0                             | 50        | 2.5                  | 9.5               | 4.500                           | 275                         |
| 5022-114J                           | 110.0                             | 60        | 0.79                 | 8.9               | 4.900                           | 262                         |
| 5022-124J                           | 120.0                             | 65        | 0.79                 | 8.7               | 5.200                           | 255                         |
| 5022-134J                           | 130.0                             | 65        | 0.79                 | 8.5               | 5.450                           | 250                         |
| 5022-154J                           | 150.0                             | 65        | 0.79                 | 8.0               | 6.050                           | 237                         |
| 5022-164J                           | 160.0                             | 65        | 0.79                 | 7.5               | 6.400                           | 230                         |
| 5022-184J                           | 180.0                             | 65        | 0.79                 | 7.0               | 6.750                           | 224                         |
| 5022-204J                           | 200.0                             | 65        | 0.79                 | 6.5               | 7.100                           | 219                         |
| 5022-224J                           | 220.0                             | 65        | 0.79                 | 6.2               | 7.450                           | 213                         |
| 5022-244J                           | 240.0                             | 65        | 0.79                 | 5.9               | 7.800                           | 210                         |
| 5022-274J                           | 270.0                             | 65        | 0.79                 | 5.7               | 11.000                          | 182                         |
| 5022-304J                           | 300.0                             | 65        | 0.79                 | 5.4               | 11.500                          | 178                         |
| 5022-334J                           | 330.0                             | 65        | 0.79                 | 5.1               | 12.000                          | 173                         |
| 5022-364J                           | 360.0                             | 65        | 0.79                 | 4.8               | 12.500                          | 171                         |
| 5022-394J                           | 390.0                             | 65        | 0.79                 | 4.5               | 16.300                          | 149                         |
| 5022-434J                           | 430.0                             | 65        | 0.79                 | 4.2               | 17.100                          | 147                         |
| 5022-474J                           | 470.0                             | 65        | 0.79                 | 3.9               | 17.900                          | 143                         |
| 5022-514J                           | 510.0                             | 65        | 0.79                 | 3.7               | 18.800                          | 139                         |
| 5022-564J                           | 560.0                             | 65        | 0.79                 | 3.8               | 19.500                          | 136                         |
| 5022-624J                           | 620.0                             | 65        | 0.79                 | 3.3               | 25.900                          | 119                         |
| 5022-684J                           | 680.0                             | 65        | 0.79                 | 3.1               | 27.200                          | 116                         |
| 5022-754J                           | 750.0                             | 65        | 0.79                 | 2.9               | 28.600                          | 112                         |
| 5022-824J                           | 820.0                             | 65        | 0.79                 | 2.7               | 30.000                          | 110                         |
| 5022-914J                           | 910.0                             | 65        | 0.79                 | 2.5               | 31.500                          | 107                         |
| 5022-105J                           | 1000.0                            | 65        | 0.79                 | 2.3               | 33.000                          | 105                         |
| OPTIONAL TOLERANCES: H=3% G=2% F=1% |                                   |           |                      |                   |                                 |                             |