

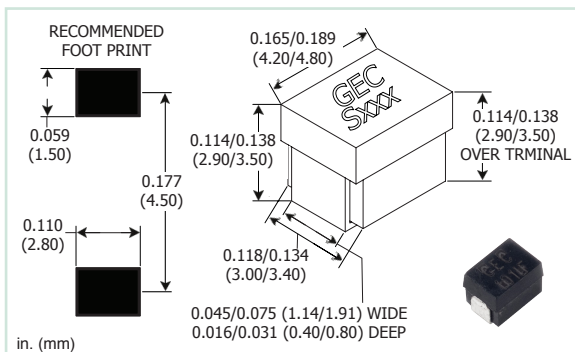
**SMRF1812S**



**SMRF1812SLF\***



*Molded Shielded Inductor*



| PART NUMBER         | L<br>μH | Q<br>MIN | TEST<br>FREQ<br>MHz | SRF<br>MIN<br>MHz | DCR<br>Ω<br>MAX | CURRENT<br>RATING<br>mA DC | INC I<br>mA DC |
|---------------------|---------|----------|---------------------|-------------------|-----------------|----------------------------|----------------|
| <b>FERRITE CORE</b> |         |          |                     |                   |                 |                            |                |
| SMRF1812S-100K      | 0.10    | 50       | 25                  | 460               | 0.052           | 1959                       | 2250           |
| SMRF1812S-120K      | 0.12    | 50       | 25                  | 400               | 0.060           | 1824                       | 2000           |
| SMRF1812S-150K      | 0.15    | 50       | 25                  | 390               | 0.060           | 1824                       | 1800           |
| SMRF1812S-180K      | 0.18    | 50       | 25                  | 350               | 0.072           | 1665                       | 1636           |
| SMRF1812S-220K      | 0.22    | 50       | 25                  | 310               | 0.078           | 1600                       | 1500           |
| SMRF1812S-270K      | 0.27    | 50       | 25                  | 280               | 0.094           | 1457                       | 1385           |
| SMRF1812S-330K      | 0.33    | 40       | 25                  | 240               | 0.101           | 1406                       | 1286           |
| SMRF1812S-390K      | 0.39    | 40       | 25                  | 215               | 0.109           | 1353                       | 1200           |
| SMRF1812S-470K      | 0.47    | 40       | 25                  | 205               | 0.143           | 1182                       | 1059           |
| SMRF1812S-560K      | 0.56    | 40       | 25                  | 185               | 0.151           | 1150                       | 947            |
| SMRF1812S-680K      | 0.68    | 40       | 25                  | 166               | 0.160           | 1117                       | 900            |
| SMRF1812S-820K      | 0.82    | 40       | 25                  | 155               | 0.178           | 1059                       | 750            |
| SMRF1812S-101J      | 1.0     | 40       | 7.9                 | 160               | 0.143           | 1182                       | 1236           |
| SMRF1812S-121J      | 1.2     | 40       | 7.9                 | 112               | 0.151           | 1150                       | 1164           |
| SMRF1812S-151J      | 1.5     | 40       | 7.9                 | 65                | 0.178           | 1059                       | 989            |
| SMRF1812S-181J      | 1.8     | 40       | 7.9                 | 60                | 0.182           | 1047                       | 942            |
| SMRF1812S-221J      | 2.2     | 40       | 7.9                 | 55                | 0.208           | 980                        | 824            |
| SMRF1812S-271J      | 2.7     | 40       | 7.9                 | 50                | 0.237           | 918                        | 761            |
| SMRF1812S-331J      | 3.3     | 40       | 7.9                 | 45                | 0.264           | 870                        | 682            |
| SMRF1812S-391J      | 3.9     | 40       | 7.9                 | 40                | 0.282           | 841                        | 638            |
| SMRF1812S-471J      | 4.7     | 40       | 7.9                 | 35                | 0.312           | 800                        | 582            |
| SMRF1812S-561J      | 5.6     | 40       | 7.9                 | 30                | 0.356           | 749                        | 521            |
| SMRF1812S-681J      | 6.8     | 40       | 7.9                 | 28                | 0.394           | 712                        | 471            |
| SMRF1812S-821J      | 8.2     | 40       | 7.9                 | 25                | 0.430           | 681                        | 430            |
| SMRF1812S-102J      | 10      | 50       | 2.5                 | 23                | 0.520           | 620                        | 342            |
| SMRF1812S-122J      | 12      | 50       | 2.5                 | 20                | 0.585           | 584                        | 306            |
| SMRF1812S-152J      | 15      | 50       | 2.5                 | 18                | 0.858           | 482                        | 278            |
| SMRF1812S-182J      | 18      | 50       | 2.5                 | 15                | 0.962           | 456                        | 254            |
| SMRF1812S-222J      | 22      | 50       | 2.5                 | 14                | 1.300           | 392                        | 228            |
| SMRF1812S-272J      | 27      | 50       | 2.5                 | 13                | 1.560           | 358                        | 207            |
| SMRF1812S-332J      | 33      | 50       | 2.5                 | 12                | 2.210           | 301                        | 181            |
| SMRF1812S-392J      | 39      | 50       | 2.5                 | 11                | 2.340           | 292                        | 174            |
| SMRF1812S-472J      | 47      | 50       | 2.5                 | 9                 | 2.600           | 277                        | 159            |
| SMRF1812S-562J      | 56      | 50       | 2.5                 | 8                 | 2.860           | 264                        | 146            |
| SMRF1812S-682J      | 68      | 50       | 2.5                 | 7.6               | 3.308           | 243                        | 133            |
| SMRF1812S-822J      | 82      | 50       | 2.5                 | 7.2               | 3.600           | 235                        | 122            |
| SMRF1812S-103J      | 100     | 40       | 0.79                | 7.0               | 3.660           | 234                        | 105            |
| SMRF1812S-123J      | 120     | 40       | 0.79                | 6.0               | 4.000           | 223                        | 95             |
| SMRF1812S-153J      | 150     | 40       | 0.79                | 5.0               | 4.710           | 206                        | 85             |
| SMRF1812S-183J      | 180     | 40       | 0.79                | 4.5               | 5.100           | 198                        | 78             |
| SMRF1812S-223J      | 220     | 40       | 0.79                | 4.2               | 7.500           | 164                        | 70             |
| SMRF1812S-273J      | 270     | 40       | 0.79                | 4.0               | 8.390           | 154                        | 64             |
| SMRF1812S-333J      | 330     | 40       | 0.79                | 3.7               | 9.690           | 144                        | 57             |
| SMRF1812S-393J      | 390     | 40       | 0.79                | 3.5               | 12.0            | 129                        | 53             |
| SMRF1812S-473J      | 470     | 40       | 0.79                | 3.3               | 13.5            | 122                        | 48             |
| SMRF1812S-563J      | 560     | 40       | 0.79                | 2.8               | 17.8            | 106                        | 47             |
| SMRF1812S-683J      | 680     | 40       | 0.79                | 2.6               | 19.3            | 102                        | 45             |
| SMRF1812S-823J      | 820     | 40       | 0.79                | 2.2               | 25.1            | 89                         | 41             |
| SMRF1812S-104J      | 1000    | 40       | 0.79                | 2.0               | 27.7            | 85                         | 37             |

**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
- **Saturation Current** is the approximate value that will reduce the initial inductance by 5%
- **Weight Max:** 0.15 grams
- **Marking:** GEC; SXXX (dash #)  
GEC  
010
- Epoxy-encapsulated for environmental protection and superior strength to withstand all types of reflow soldering
- When ordering, specify **tolerance & termination:**  
SMRF1812S-100KLF  
**Tolerance:** M = 20%, K = 10%, J = 5%  
(Table shows lowest standard tolerance option)  
\*Optional tolerances are available; contact factory  
**Termination:** LF = RoHS compliant tin-silver copper over copper
- Custom designs are available to meet your specific requirements; please contact factory

**TAPE AND REEL SPECS:**

|                      |        |
|----------------------|--------|
| Pcs./Reel maximum:   | 2200   |
| Pitch between parts: | 8 mm   |
| Tape width:          | 12 mm  |
| Reel diameter:       | 13 in. |

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