

SERIES

S1812R
S1812

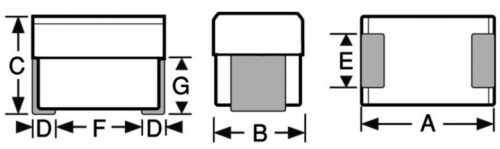


Shielded Surface Mount Inductors

| | | | | |
|----------------------------------|----------------------|-------------------|------------------------------|-----------------------------|
| INDUCTANCE (μ H) $\pm 10\%$ | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
| DASH NUMBER* | Q MINIMUM | | | |



Actual Size



Physical Parameters

| | Inches | Millimeters |
|---|-------------------|-----------------|
| A | 0.166 to 0.190 | 4.2 to 4.8 |
| B | 0.118 to 0.134 | 3.0 to 3.4 |
| C | 0.118 to 0.134 | 3.0 to 3.4 |
| D | 0.015 Min. | 0.38 Min. |
| E | 0.054 to 0.078 | 1.37 to 1.98 |
| F | 0.118 (Ref. only) | 3.0 (Ref. only) |
| G | 0.066 (Ref. only) | 1.7 (Ref. only) |

Dimensions "A" and "C" are over terminals

Weight Max. (Grams) 0.15

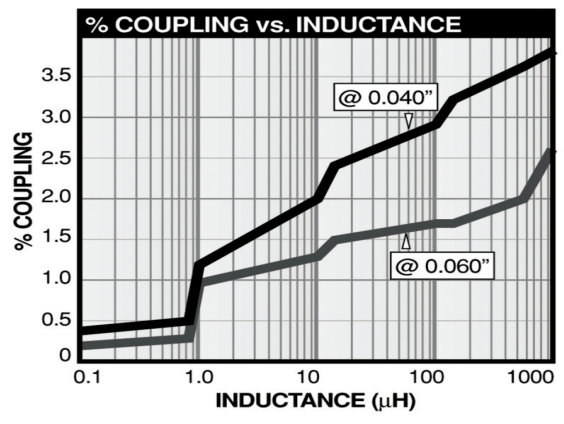
Operating Temperature Range -55°C to $+125^{\circ}\text{C}$

Current Rating at 90°C Ambient 35°C Rise

Maximum Power Dissipation at 90°C 0.278 W

Marking API/SMD; inductance with units and tolerance followed by an S; date code (YYWWL). Note: An R before the date code indicates a RoHS component.

Example: S1812R-102K
API/SMD
1.0uH $\pm 10\%$ S
R 0743A



For more detailed graphs, contact factory

| SERIES S1812 IRON CORE | | | | | | |
|---------------------------|------|----|------|-----|------|------|
| -101K | 0.10 | 50 | 25 | 460 | 0.09 | 1490 |
| -121K | 0.12 | 50 | 25 | 400 | 0.10 | 1412 |
| -151K | 0.15 | 50 | 25 | 390 | 0.11 | 1347 |
| -181K | 0.18 | 50 | 25 | 350 | 0.12 | 1290 |
| -221K | 0.22 | 50 | 25 | 310 | 0.15 | 1154 |
| -271K | 0.27 | 50 | 25 | 280 | 0.18 | 1053 |
| -331K | 0.33 | 40 | 25 | 240 | 0.22 | 952 |
| -391K | 0.39 | 40 | 25 | 215 | 0.26 | 876 |
| -471K | 0.47 | 40 | 25 | 205 | 0.31 | 802 |
| -561K | 0.56 | 40 | 25 | 185 | 0.37 | 735 |
| -681K | 0.68 | 40 | 25 | 166 | 0.44 | 675 |
| -821K | 0.82 | 40 | 25 | 155 | 0.53 | 614 |
| SERIES S1812 FERRITE CORE | | | | | | |
| -102K | 1.0 | 40 | 7.9 | 160 | 0.35 | 755 |
| -122K | 1.2 | 40 | 7.9 | 140 | 0.38 | 725 |
| -152K | 1.5 | 40 | 7.9 | 110 | 0.40 | 706 |
| -182K | 1.8 | 40 | 7.9 | 100 | 0.43 | 681 |
| -222K | 2.2 | 40 | 7.9 | 90 | 0.46 | 658 |
| -272K | 2.7 | 40 | 7.9 | 67 | 0.49 | 638 |
| -332K | 3.3 | 40 | 7.9 | 61 | 0.70 | 534 |
| -392K | 3.9 | 40 | 7.9 | 56 | 0.84 | 487 |
| -472K | 4.7 | 40 | 7.9 | 50 | 0.90 | 471 |
| -562K | 5.6 | 40 | 7.9 | 40 | 1.00 | 447 |
| -682K | 6.8 | 40 | 7.9 | 32 | 1.20 | 408 |
| -822K | 8.2 | 40 | 7.9 | 30 | 1.44 | 372 |
| -103K | 10 | 50 | 2.5 | 25 | 1.80 | 333 |
| -123K | 12 | 50 | 2.5 | 22 | 2.00 | 315 |
| -153K | 15 | 50 | 2.5 | 18 | 2.20 | 301 |
| -183K | 18 | 50 | 2.5 | 15 | 2.40 | 288 |
| -223K | 22 | 50 | 2.5 | 14 | 2.60 | 277 |
| -273K | 27 | 50 | 2.5 | 13 | 2.80 | 267 |
| -333K | 33 | 50 | 2.5 | 12 | 3.00 | 258 |
| -393K | 39 | 50 | 2.5 | 11 | 3.20 | 250 |
| -473K | 47 | 50 | 2.5 | 9.0 | 3.40 | 242 |
| -563K | 56 | 50 | 2.5 | 8.0 | 3.60 | 235 |
| -683K | 68 | 50 | 2.5 | 7.6 | 4.30 | 215 |
| -823K | 82 | 50 | 2.5 | 7.2 | 5.20 | 196 |
| -104K | 100 | 40 | 0.79 | 7.0 | 7.00 | 169 |
| -124K | 120 | 40 | 0.79 | 6.0 | 7.50 | 163 |
| -154K | 150 | 40 | 0.79 | 5.0 | 8.00 | 158 |
| -184K | 180 | 40 | 0.79 | 4.5 | 8.50 | 153 |
| -224K | 220 | 40 | 0.79 | 4.2 | 9.00 | 149 |
| -274K | 270 | 40 | 0.79 | 4.0 | 11.0 | 135 |
| -334K | 330 | 40 | 0.79 | 3.7 | 12.0 | 129 |
| -394K | 390 | 40 | 0.79 | 3.5 | 18.0 | 105 |
| -474K | 470 | 40 | 0.79 | 3.3 | 24.0 | 91 |
| -564K | 560 | 40 | 0.79 | 2.8 | 28.0 | 84 |
| -684K | 680 | 40 | 0.79 | 2.6 | 32.0 | 79 |
| -824K | 820 | 40 | 0.79 | 2.2 | 40.0 | 71 |
| -105K | 1000 | 40 | 0.79 | 2.0 | 55.0 | 60 |

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%

Packaging Tape & reel (12mm): 7" reel, 650 pieces max.; 13" reel, 2500 pieces max.

Made In the U.S.A.