

**SERIES**

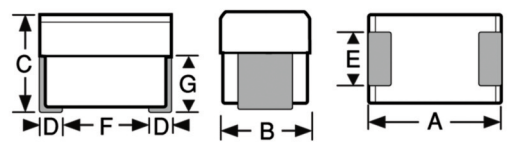
**1812R**  
**1812**



**Unshielded Surface Mount Inductors**



Actual Size



**Physical Parameters**

|   | Inches            | Millimeters      |
|---|-------------------|------------------|
| A | 0.166 to 0.190    | 4.22 to 4.83     |
| B | 0.118 to 0.134    | 3.00 to 3.40     |
| C | 0.118 to 0.134    | 3.00 to 3.40     |
| D | 0.015 Min.        | 0.38 Min.        |
| E | 0.054 to 0.078    | 1.37 to 1.98     |
| F | 0.118 (Ref. only) | 3.00 (Ref. only) |
| G | 0.066 (Ref. only) | 1.68 (Ref. only) |

Dimensions "A" and "C" are over terminals

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

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

**Maximum Power Dissipation at 90°C**

Iron and Ferrite: 0.278 W  
Phenolic: 0.210 W

\* **Note** Self Resonant Frequency (SRF) values are calculated and for reference only.

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

Example: 1812R-105J  
API/SMD  
1mH±5%  
R 0629A

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

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

Optional Tolerances: J = 5% H = 3% G = 2% F = 1%  
\*Complete part # must include series # PLUS the dash #  
For surface finish information, refer to www.delevanfinishes.com

| DASH NUMBER* | INDUCTANCE (µH) | TOLERANCE | Q MINIMUM | TEST FREQUENCY (MHz) | SRF MINIMUM (MHz) | DC RESISTANCE MAXIMUM (OHMS) | CURRENT RATING MAXIMUM (mA) |
|--------------|-----------------|-----------|-----------|----------------------|-------------------|------------------------------|-----------------------------|
|--------------|-----------------|-----------|-----------|----------------------|-------------------|------------------------------|-----------------------------|

| SERIES 1812 PHENOLIC CORE |       |      |    |      |       |      |      |
|---------------------------|-------|------|----|------|-------|------|------|
| -100M                     | 0.010 | ±20% | 40 | 50   | 1000* | 0.10 | 1230 |
| -120M                     | 0.012 | ±20% | 40 | 50   | 1000* | 0.10 | 1230 |
| -150M                     | 0.015 | ±20% | 40 | 50   | 1000* | 0.10 | 1230 |
| -180M                     | 0.018 | ±20% | 40 | 50   | 1000* | 0.10 | 1230 |
| -220M                     | 0.022 | ±20% | 40 | 50   | 1000* | 0.10 | 1230 |
| -270M                     | 0.027 | ±20% | 40 | 50   | 1000* | 0.15 | 1000 |
| -330M                     | 0.033 | ±20% | 40 | 50   | 1000* | 0.15 | 1000 |
| -390M                     | 0.039 | ±20% | 30 | 50   | 1000* | 0.20 | 870  |
| -470M                     | 0.047 | ±20% | 30 | 50   | 1000* | 0.20 | 870  |
| -560M                     | 0.056 | ±20% | 30 | 50   | 850*  | 0.25 | 770  |
| -680M                     | 0.068 | ±20% | 25 | 50   | 750*  | 0.25 | 770  |
| -820M                     | 0.082 | ±20% | 25 | 50   | 750*  | 0.25 | 700  |
| SERIES 1812 IRON CORE     |       |      |    |      |       |      |      |
| -101K                     | 0.10  | ±10% | 30 | 25   | 650   | 0.30 | 818  |
| -121K                     | 0.12  | ±10% | 30 | 25   | 600   | 0.30 | 818  |
| -151K                     | 0.15  | ±10% | 30 | 25   | 500   | 0.30 | 818  |
| -181K                     | 0.18  | ±10% | 30 | 25   | 400   | 0.35 | 757  |
| -221K                     | 0.22  | ±10% | 30 | 25   | 350   | 0.40 | 708  |
| -271K                     | 0.27  | ±10% | 30 | 25   | 300   | 0.45 | 668  |
| -331K                     | 0.33  | ±10% | 30 | 25   | 250   | 0.55 | 604  |
| -391K                     | 0.39  | ±10% | 30 | 25   | 220   | 0.70 | 535  |
| -471K                     | 0.47  | ±10% | 30 | 25   | 190   | 0.80 | 501  |
| -561K                     | 0.56  | ±10% | 30 | 25   | 170   | 1.20 | 409  |
| -681K                     | 0.68  | ±10% | 30 | 25   | 150   | 1.40 | 379  |
| -821K                     | 0.82  | ±10% | 30 | 25   | 140   | 1.60 | 354  |
| SERIES 1812 FERRITE CORE  |       |      |    |      |       |      |      |
| -102J                     | 1.0   | ±5%  | 50 | 7.9  | 100   | 0.50 | 634  |
| -122J                     | 1.2   | ±5%  | 50 | 7.9  | 80    | 0.55 | 604  |
| -152J                     | 1.5   | ±5%  | 50 | 7.9  | 70    | 0.60 | 578  |
| -182J                     | 1.8   | ±5%  | 50 | 7.9  | 60    | 0.65 | 556  |
| -222J                     | 2.2   | ±5%  | 50 | 7.9  | 55    | 0.70 | 535  |
| -272J                     | 2.7   | ±5%  | 50 | 7.9  | 50    | 0.75 | 517  |
| -332J                     | 3.3   | ±5%  | 50 | 7.9  | 45    | 0.80 | 501  |
| -392J                     | 3.9   | ±5%  | 50 | 7.9  | 40    | 0.90 | 472  |
| -472J                     | 4.7   | ±5%  | 50 | 7.9  | 35    | 1.00 | 448  |
| -562J                     | 5.6   | ±5%  | 50 | 7.9  | 33    | 1.10 | 427  |
| -682J                     | 6.8   | ±5%  | 50 | 7.9  | 27    | 1.20 | 409  |
| -822J                     | 8.2   | ±5%  | 50 | 7.9  | 25    | 1.40 | 375  |
| -103J                     | 10    | ±5%  | 50 | 7.9  | 20    | 1.60 | 354  |
| -123J                     | 12    | ±5%  | 50 | 2.5  | 18    | 2.00 | 317  |
| -153J                     | 15    | ±5%  | 50 | 2.5  | 17    | 2.50 | 283  |
| -183J                     | 18    | ±5%  | 50 | 2.5  | 15    | 2.80 | 268  |
| -223J                     | 22    | ±5%  | 50 | 2.5  | 13    | 3.20 | 250  |
| -273J                     | 27    | ±5%  | 50 | 2.5  | 12    | 3.60 | 236  |
| -333J                     | 33    | ±5%  | 50 | 2.5  | 11    | 4.00 | 224  |
| -393J                     | 39    | ±5%  | 50 | 2.5  | 10    | 4.50 | 211  |
| -473J                     | 47    | ±5%  | 50 | 2.5  | 10    | 5.00 | 200  |
| -563J                     | 56    | ±5%  | 50 | 2.5  | 9     | 5.50 | 191  |
| -683J                     | 68    | ±5%  | 50 | 2.5  | 9     | 6.00 | 183  |
| -823J                     | 82    | ±5%  | 50 | 2.5  | 8     | 7.00 | 169  |
| -104J                     | 100   | ±5%  | 50 | 2.5  | 8     | 8.00 | 158  |
| -124J                     | 120   | ±5%  | 40 | 0.79 | 6     | 8.0  | 158  |
| -154J                     | 150   | ±5%  | 40 | 0.79 | 6     | 9.0  | 149  |
| -184J                     | 180   | ±5%  | 40 | 0.79 | 5     | 9.5  | 145  |
| -224J                     | 220   | ±5%  | 40 | 0.79 | 4     | 10.0 | 142  |
| -274J                     | 270   | ±5%  | 40 | 0.79 | 4     | 12.0 | 129  |
| -334J                     | 330   | ±5%  | 40 | 0.79 | 3.5   | 14.0 | 120  |
| -394J                     | 390   | ±5%  | 40 | 0.79 | 3.0   | 20.0 | 100  |
| -474J                     | 470   | ±5%  | 40 | 0.79 | 3.0   | 26.0 | 88   |
| -564J                     | 560   | ±5%  | 30 | 0.79 | 3.0   | 30.0 | 82   |
| -684J                     | 680   | ±5%  | 30 | 0.79 | 3.0   | 30.0 | 82   |
| -824J                     | 820   | ±5%  | 30 | 0.79 | 2.5   | 45.0 | 67   |
| -105J                     | 1000  | ±5%  | 30 | 0.79 | 2.5   | 60.0 | 55   |