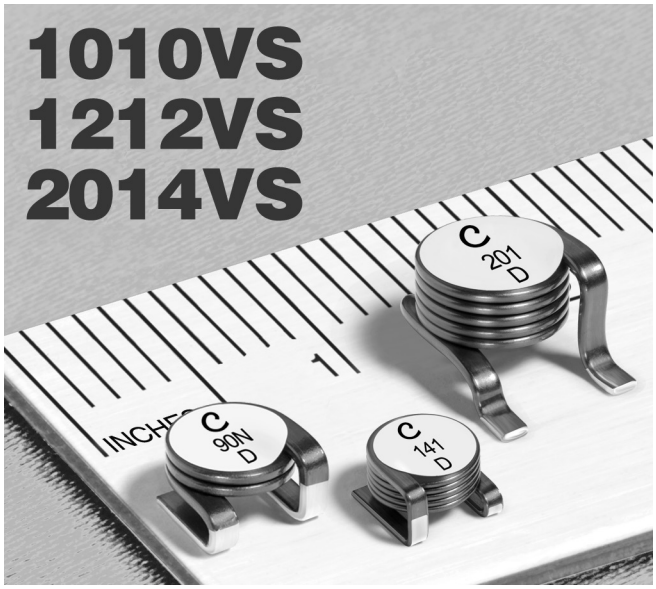
NEW!

# High Frequency, High Current Power Inductors




- Excellent Q factors – up to 230 at 400 MHz!
- Current handling as high as 57 Amps
- Inductance values from 22 to 257 nH

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant tin-silver over copper

**Ambient temperature** –40°C to +125°C with Irms current, +125°C to +145°C with derated current

**Storage temperature** Component: –40°C to +145°C. Tape and reel packaging: –40°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Temperature Coefficient of Inductance (TCL)** +5 to +70 ppm/°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Mean Time Between Failures (MTBF)** 1 billion hours

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

| Part number[1] | Inductance[2] ±20% (nH) | Q[3] typ | Q test freq (MHz) | SRF typ[4] (MHz) | DCR (mOhm) typ | DCR (mOhm) max | Irms (A)[5] 20°C rise | Irms (A)[5] 40°C rise | Weight (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1010VS-23NME_ | 23.5 | 95 | 100 | 923 | 1.05 | 1.20 | 18.0 | 26.0 | 0.49 |
| 1010VS-46NME_ | 46.5 | 150 | 100 | 526 | 1.50 | 1.62 | 17.9 | 25.5 | 0.65 |
| 1010VS-79NME_ | 79.0 | 135 | 50 | 386 | 1.95 | 2.11 | 17.8 | 25.0 | 0.82 |
| 1010VS-111ME_ | 111 | 150 | 50 | 382 | 2.53 | 2.73 | 15.7 | 22.0 | 0.98 |
| 1010VS-141ME_ | 146 | 140 | 50 | 433 | 3.08 | 3.33 | 14.1 | 19.3 | 1.23 |
| 1212VS-22NME_ | 22.0 | 200 | 100 | 918 | 0.48 | 0.55 | 40.5 | 57.0 | 2.20 |
| 1212VS-42NME_ | 42.0 | 195 | 50 | 557 | 0.70 | 0.77 | 38.0 | 52.0 | 2.70 |
| 1212VS-66NME_ | 66.0 | 200 | 50 | 480 | 0.90 | 0.99 | 35.0 | 48.0 | 3.20 |
| 1212VS-90NME_ | 90.0 | 175 | 50 | 444 | 1.10 | 1.21 | 33.0 | 45.0 | 3.70 |
| 1212VS-111ME_ | 117 | 165 | 50 | 399 | 1.30 | 1.43 | 32.0 | 44.0 | 4.20 |
| 2014VS-33NME_ | 33 | 230 | 100 | 620 | 0.63 | 0.74 | 32.5 | 43.0 | 1.60 |
| 2014VS-66NME_ | 66 | 200 | 50 | 413 | 0.90 | 1.00 | 31.5 | 42.5 | 2.30 |
| 2014VS-111ME_ | 108 | 210 | 50 | 320 | 1.20 | 1.34 | 31.0 | 42.0 | 3.10 |
| 2014VS-151ME_ | 155 | 205 | 50 | 296 | 1.44 | 1.60 | 29.4 | 39.7 | 3.60 |
| 2014VS-201ME_ | 202 | 200 | 50 | 262 | 1.70 | 1.82 | 26.3 | 35.8 | 4.40 |
| 2014VS-251ME_ | 257 | 200 | 50 | 230 | 1.94 | 2.15 | 24.9 | 34.5 | 5.00 |

1. When ordering, specify **packaging** code:

**2014VS-251MEC**

**Packaging:** **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape.
**B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
**D** = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked.

2. Inductance measured at 1.0 MHz, 0.1 Vrms, 0 A using an Agilent/HP HP4291A impedance analyzer with an Agilent/HP 16193A test fixture or equivalents.
3. Q measured at the specified frequency using an Agilent/HP 4291A impedance analyzer or equivalent.
4. SRF measured using an Agilent/HP 8753 network analyzer or equivalent and a Coilcraft CCF1199 test fixture
5. Current that causes the specified temperature rise from 25°C ambient.
6. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Coilcraft®
www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com
**UK** +44-1236-730595 sales@coilcraft-europe.com
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw
**China** +86-21-6218 8074 sales@coilcraft.com.cn
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

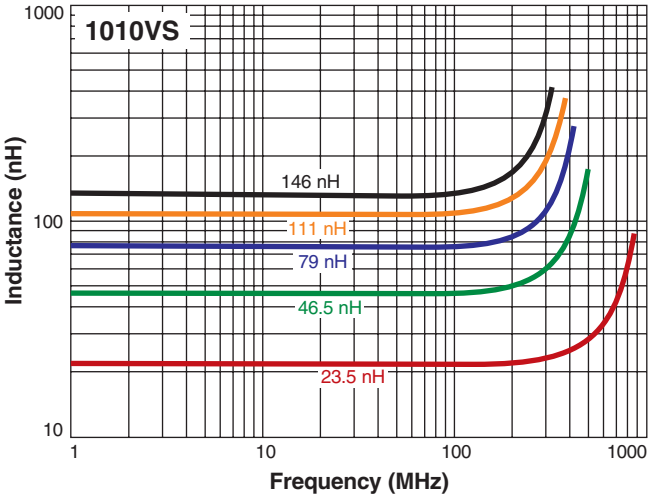
Document 893-1 Revised 01/23/13

NEW!

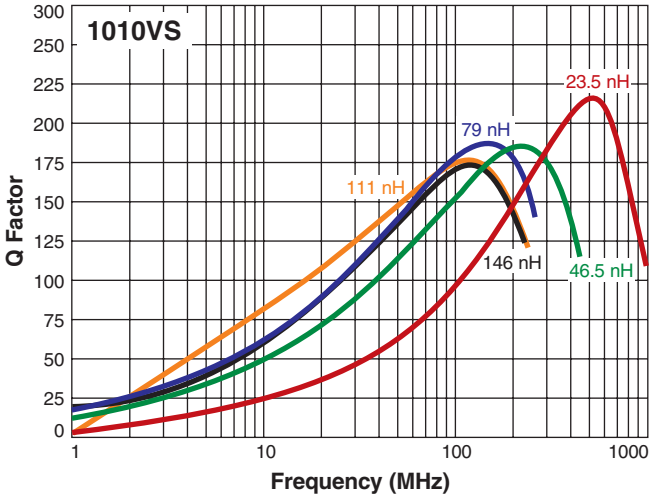
RoHS Halogen Free

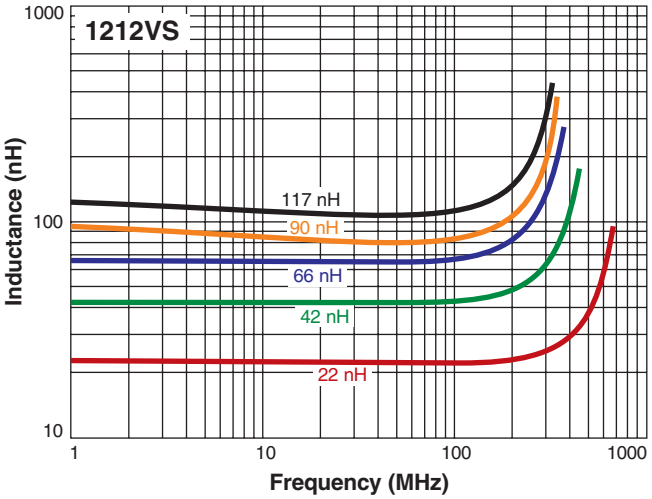
# High Frequency, High Current Power Inductors – 1010VS, 1212VS, 2014VS

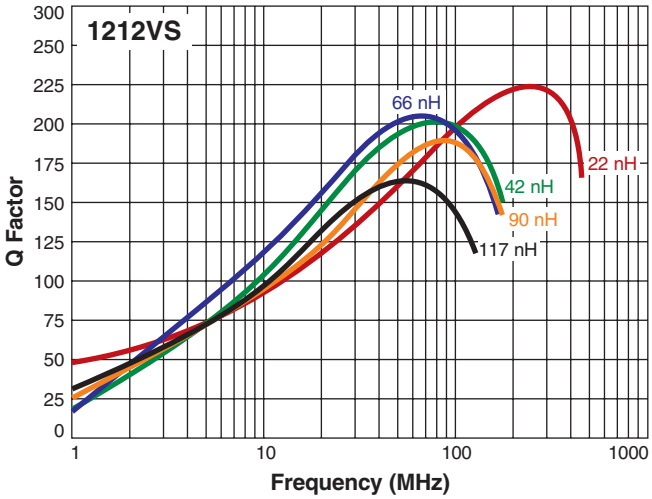
## L vs Frequency

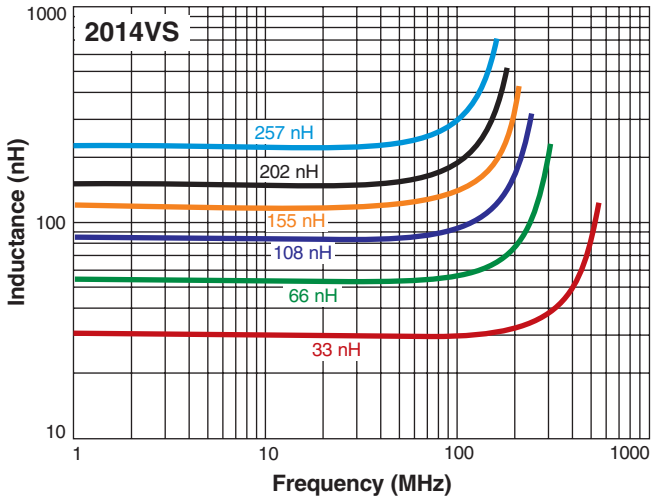


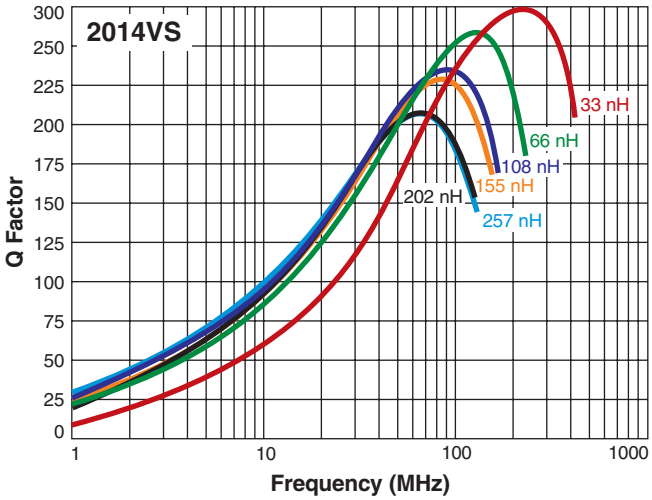

## Q vs Frequency




Coilcraft®
www.coilcraft.com

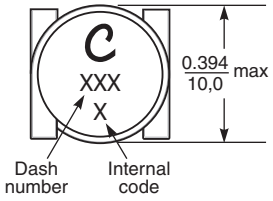
**US** +1-847-639-6400 sales@coilcraft.com
**UK** +44-1236-730595 sales@coilcraft-europe.com
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw
**China** +86-21-6218 8074 sales@coilcraft.com.cn
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

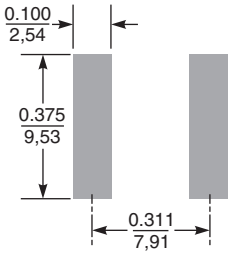
NEW!

RoHS Halogen Free

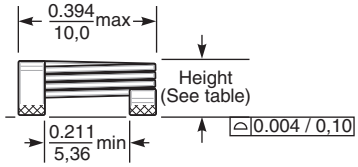
# High Frequency, High Current Power Inductors – 1010VS, 1212VS, 2014VS

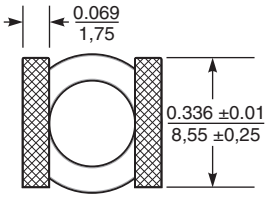
## 1010VS



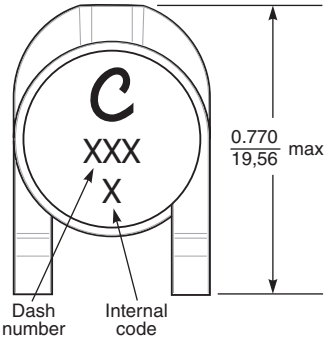

Recommended Land Pattern

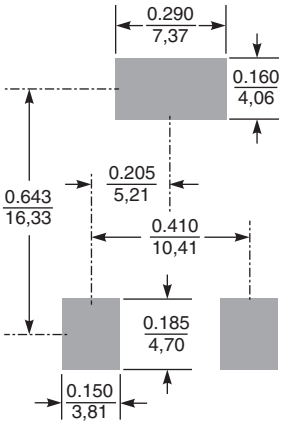


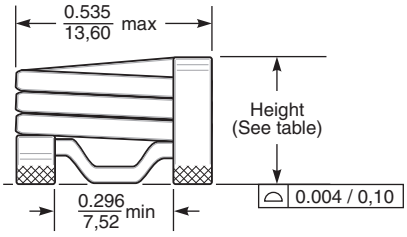

| Part number | Height inches | Height mm | Weight (g) |
|---|---|---|---|
| 1010VS-23N | 0.142 | 3,60 | 0.49 |
| 1010VS-46N | 0.161 | 4,10 | 0.65 |
| 1010VS-79N | 0.189 | 4,80 | 0.82 |
| 1010VS-111 | 0.220 | 5,60 | 0.98 |
| 1010VS-141 | 0.240 | 6,10 | 1.23 |

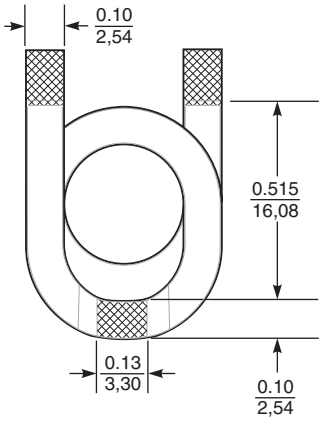
## 2014VS



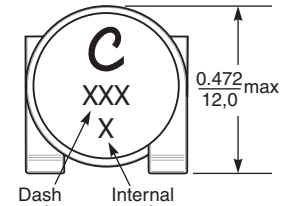

Recommended Land Pattern

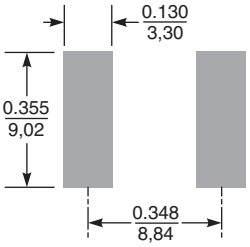


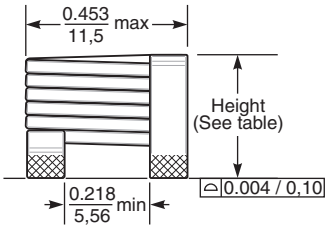

| Part number | Height inches | Height mm | Weight (g) |
|---|---|---|---|
| 2014VS-33N | 0.236 | 5,99 | 1.6 |
| 2014VS-66N | 0.279 | 7,09 | 2.3 |
| 2014VS-111 | 0.327 | 8,31 | 3.1 |
| 2014VS-151 | 0.362 | 9,19 | 3.6 |
| 2014VS-201 | 0.409 | 10,4 | 4.4 |
| 2014VS-251 | 0.449 | 11,4 | 5.0 |

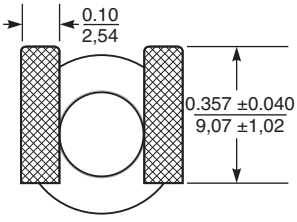
## 1212VS




Recommended Land Pattern




| Part number | Height inches | Height mm | Weight (g) |
|---|---|---|---|
| 1212VS-22N | 0.260 | 6,60 | 2.2 |
| 1212VS-42N | 0.299 | 7,60 | 2.7 |
| 1212VS-66N | 0.346 | 8,80 | 3.2 |
| 1212VS-90N | 0.409 | 10,4 | 3.7 |
| 1212VS-111 | 0.445 | 11,3 | 4.2 |

All dimensions are in inches / mm.

### Packaging

**1010VS-23N** 250/7″ reel; ; 1000/13″ reel; 3.81 mm pocket depth
**1010VS-46N** 250/7″ reel; ; 900/13″ reel; 4.32 mm pocket depth
**1010VS-79N** 200/7″ reel; ; 800/13″ reel; 5.05 mm pocket depth
Plastic tape: 24 mm wide, 0.35 mm thick, 16 mm pocket spacing

**1010VS-111** 175/7″ reel; ; 700/13″ reel; 5.84 mm pocket depth
**1010VS-141** 150/7″ reel; ; 600/13″ reel; 6.35 mm pocket depth
Plastic tape: 24 mm wide, 0.40 mm thick, 16 mm pocket spacing

**1212VS-22N** 450/13″ reel; 8.86 mm pocket depth
**1212VS-42N** 400/13″ reel; 7.87 mm pocket depth
**1212VS-66N** 350/13″ reel; 9.02 mm pocket depth
**1212VS-90N** 300/13″ reel; 10.67 mm pocket depth
**1212VS-111** 250/13″ reel; 11.68 mm pocket depth
Plastic tape: 24 mm wide, 0.50 mm thick, 20 mm pocket spacing

**2014VS-33N** 500/13″ reel; 6,22 mm pocket depth
**2014VS-66N** 450/13″ reel; 7,37 mm pocket depth
**2014VS-111** 400/13″ reel; 8,56 mm pocket depth
**2014VS-151** 350/13″ reel; 9,45 mm pocket depth
**2014VS-201** 350/13″ reel; 10,67 mm pocket depth
**2014VS-251** 250/13″ reel; 11,68 mm pocket depth
Plastic tape: 44 mm wide, 0.50 mm thick, 20 mm pocket spacing

Coilcraft®
www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com
**UK** +44-1236-730595 sales@coilcraft-europe.com
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw
**China** +86-21-6218 8074 sales@coilcraft.com.cn
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

Document 893-3 Revised 01/23/13

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

**Данный компонент на территории Российской Федерации**

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

**Офис по работе с юридическими лицами:**

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9