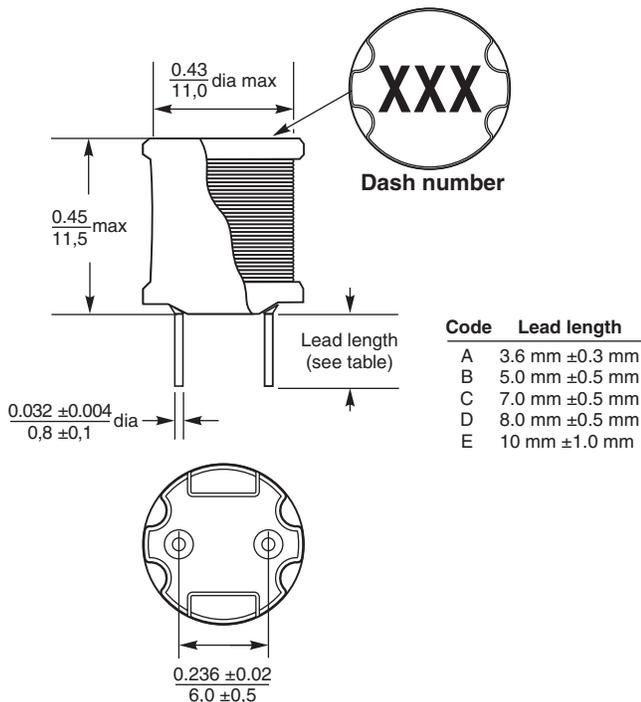


**NEW!**

# Power Inductors – RFC1010 Series



- Low cost, high current power inductors
- 30 inductance values; 68  $\mu$ H to 18 mH
- Flame retardant polyolefin wrap to protect the winding.

**Core material** Ferrite**Terminations** RoHS compliant tin-silver over tin over copper over steel. Other terminations available at additional cost**Environmental** RoHS compliant, halogen free**Weight** 3.2 – 3.7 g**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with  $I_{\text{rms}}$  current,  $+85^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with derated current**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .  
Tray or tape packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ **Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**  
38 per billion hours / 26,315,789 hours, calculated per Telcordia SRA-332**Packaging** 150 parts per tray**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdfDimensions are in  $\frac{\text{inches}}{\text{mm}}$ 

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 1125-1 Revised 01/30/14

© Coilcraft Inc. 2014

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

**NEW!**

# Power Inductors – RFC1010 Series



| Part number <sup>1</sup> | Inductance <sup>2</sup><br>±10% (µH) | DCR (Ohms) |       | SRF typ <sup>3</sup><br>(MHz) | Isat (A) <sup>4</sup> |          |          | Irms (A) <sup>5</sup> |           |
|--------------------------|--------------------------------------|------------|-------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|
|                          |                                      | typ        | max   |                               | 10% drop              | 20% drop | 30% drop | 20°C rise             | 40°C rise |
| RFC1010B-683KE           | 68                                   | 0.100      | 0.115 | 5.6                           | 3.20                  | 3.67     | 3.94     | 1.80                  | 2.40      |
| RFC1010B-823KE           | 82                                   | 0.110      | 0.125 | 5.4                           | 2.95                  | 3.40     | 3.67     | 1.70                  | 2.30      |
| RFC1010B-104KE           | 100                                  | 0.130      | 0.150 | 4.7                           | 2.65                  | 3.03     | 3.27     | 1.60                  | 2.15      |
| RFC1010B-124KE           | 120                                  | 0.170      | 0.195 | 4.3                           | 2.40                  | 2.78     | 2.98     | 1.40                  | 1.90      |
| RFC1010B-154KE           | 150                                  | 0.200      | 0.230 | 4.0                           | 2.20                  | 2.50     | 2.70     | 1.30                  | 1.75      |
| RFC1010B-184KE           | 180                                  | 0.255      | 0.295 | 3.4                           | 2.00                  | 2.28     | 2.44     | 1.10                  | 1.55      |
| RFC1010B-224KE           | 220                                  | 0.290      | 0.335 | 3.1                           | 1.85                  | 2.08     | 2.25     | 1.05                  | 1.45      |
| RFC1010B-274KE           | 270                                  | 0.380      | 0.440 | 2.8                           | 1.65                  | 1.88     | 2.04     | 0.90                  | 1.27      |
| RFC1010B-334KE           | 330                                  | 0.435      | 0.500 | 2.6                           | 1.50                  | 1.72     | 1.84     | 0.85                  | 1.18      |
| RFC1010B-394KE           | 390                                  | 0.485      | 0.560 | 2.4                           | 1.40                  | 1.60     | 1.72     | 0.82                  | 1.12      |
| RFC1010B-474KE           | 470                                  | 0.630      | 0.725 | 2.1                           | 1.25                  | 1.42     | 1.53     | 0.72                  | 1.00      |
| RFC1010B-564KE           | 560                                  | 0.700      | 0.805 | 1.9                           | 1.15                  | 1.32     | 1.42     | 0.68                  | 0.92      |
| RFC1010B-684KE           | 680                                  | 0.965      | 1.11  | 1.7                           | 1.05                  | 1.18     | 1.26     | 0.58                  | 0.78      |
| RFC1010B-824KE           | 820                                  | 1.07       | 1.20  | 1.6                           | 0.95                  | 1.10     | 1.18     | 0.54                  | 0.74      |
| RFC1010B-105KE           | 1000                                 | 1.24       | 1.40  | 1.5                           | 0.90                  | 1.00     | 1.07     | 0.50                  | 0.70      |
| RFC1010B-125KE           | 1200                                 | 1.61       | 1.85  | 1.3                           | 0.75                  | 0.90     | 0.96     | 0.43                  | 0.61      |
| RFC1010B-155KE           | 1500                                 | 1.78       | 2.05  | 1.2                           | 0.70                  | 0.81     | 0.86     | 0.41                  | 0.58      |
| RFC1010B-185KE           | 1800                                 | 2.40       | 2.75  | 1.1                           | 0.64                  | 0.71     | 0.77     | 0.36                  | 0.50      |
| RFC1010B-225KE           | 2200                                 | 2.80       | 3.20  | 0.99                          | 0.58                  | 0.65     | 0.70     | 0.33                  | 0.47      |
| RFC1010B-275KE           | 2700                                 | 3.65       | 4.20  | 0.82                          | 0.53                  | 0.59     | 0.63     | 0.29                  | 0.41      |
| RFC1010B-335KE           | 3300                                 | 4.15       | 4.75  | 0.75                          | 0.48                  | 0.53     | 0.57     | 0.28                  | 0.38      |
| RFC1010B-395KE           | 3900                                 | 4.65       | 5.30  | 0.71                          | 0.45                  | 0.49     | 0.53     | 0.26                  | 0.36      |
| RFC1010B-475KE           | 4700                                 | 6.05       | 6.95  | 0.61                          | 0.41                  | 0.45     | 0.48     | 0.22                  | 0.32      |
| RFC1010B-565KE           | 5600                                 | 6.75       | 7.75  | 0.57                          | 0.37                  | 0.41     | 0.44     | 0.21                  | 0.30      |
| RFC1010B-685KE           | 6800                                 | 8.90       | 10.0  | 0.49                          | 0.34                  | 0.38     | 0.40     | 0.180                 | 0.260     |
| RFC1010B-825KE           | 8200                                 | 10.0       | 11.0  | 0.46                          | 0.32                  | 0.35     | 0.37     | 0.170                 | 0.245     |
| RFC1010B-106KE           | 10,000                               | 14.0       | 15.5  | 0.43                          | 0.29                  | 0.31     | 0.33     | 0.150                 | 0.210     |
| RFC1010B-126KE           | 12,000                               | 16.0       | 17.5  | 0.41                          | 0.25                  | 0.28     | 0.30     | 0.135                 | 0.180     |
| RFC1010B-156KE           | 15,000                               | 18.0       | 19.5  | 0.38                          | 0.23                  | 0.26     | 0.28     | 0.130                 | 0.170     |
| RFC1010B-186KE           | 18,000                               | 23.0       | 25.0  | 0.33                          | 0.21                  | 0.23     | 0.24     | 0.115                 | 0.150     |

1. When ordering, please specify **lead length** and **termination** codes:

RFC1010B-183E

**Lead length:** **A** = 3.6 mm ±0.3 mm (special order)  
**B** = 5.0 mm ±0.5 mm  
**C** = 7.0 mm ±0.5 mm (special order)  
**D** = 8.0 mm ±0.5 mm (special order)  
**E** = 10.0 mm ±1.0 mm (special order)

**Termination:** **E** = RoHS compliant tin-silver over tin over copper over steel.  
Special order: **S** = non-RoHS tin-lead (63/37).

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- SRF measured using Agilent/HP 4191A or equivalent.
- DC current at which the inductance drops the specified amount from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.
- Electrical specifications at 25°C.



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 1125-2 Revised 01/30/14

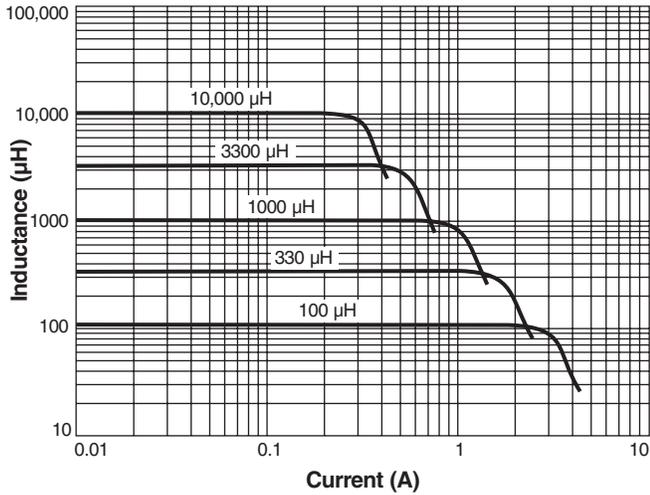
© Coilcraft Inc. 2014

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

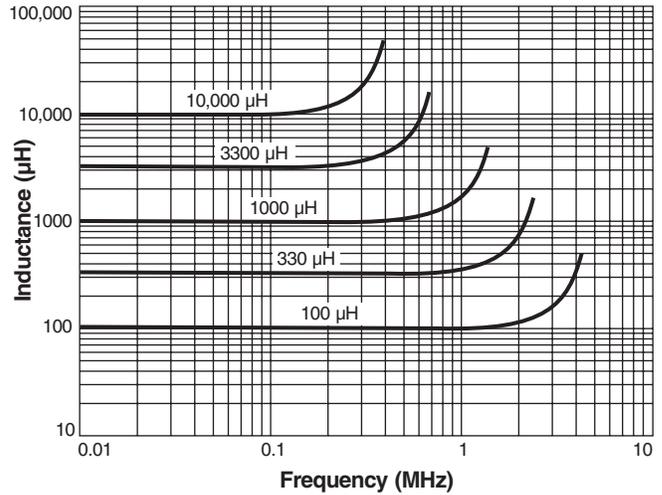
**NEW!**

# Power Inductors – RFC1010 Series

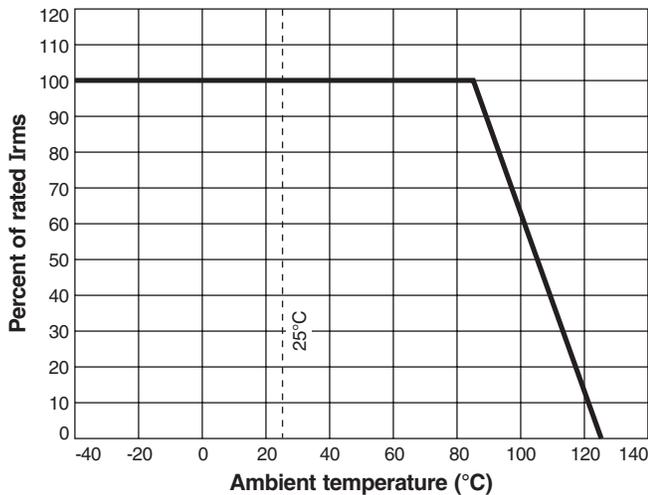
## Typical L vs Current



## Typical L vs Frequency



## Typical Irms derating



## 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](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9