

# Choke Coil Inductors

**Limit the alternating current through the choke coils (TCRC)**

## ▶ Preview

Choke coils, also known as: Choke, differential mode inductors, is used to limit the alternating current through the coil, high-frequency and low frequency choke coils.

Token TCRC series structure with open magnetic circuit design and protect by UL or PVC Heat-shrinkable tube. The TCRC features with small size, high Q value, low cost, high self-resonance frequency, high availability of a large induced current, small magnetic flux leakage and so on.

The TCRC is ideal for notebook computers, inkjet printers, photocopying machines, display monitors, mobile phones, broadband modems, game consoles, color TV, VCR, camera, microwave ovens, lighting equipment, automotive electronics products.

Token will also produce devices outside these specifications to meet specific customer requirements, please contact our sales for more information.

## Features :

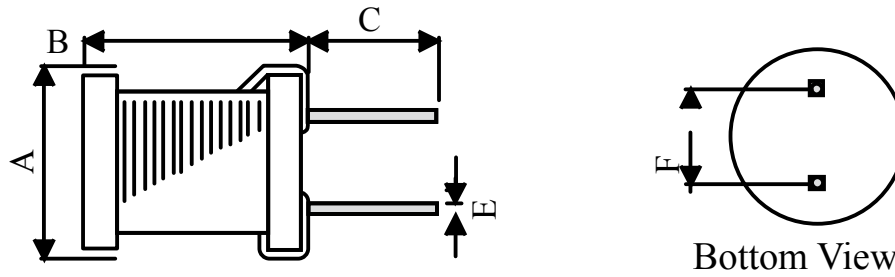
- Open magnetic circuit construction
- Low cost and high reliability

## Applications :

- Notebook, Inkjet printer, Copying machine,
- Display Monitor, Cellular Phone, ADSL Modem,
- Gaming machine, Color TV, Video tape recorder,
- Microwave Oven, Lighting and Car Electronics.



## Configurations & Dimensions



Type	$\Phi A(\text{max})$	B(max)	$C \pm 1.5$	$\Phi E \pm 0.05$	$F \pm 0.5$
TCRC0406	4.0	6.0	14.0	0.50	2.0
TCRC0608	6.0	8.3	14.0	0.60	3.0
TCRC0810	8.0	10.0	14.0	0.60	5.0
TCRC0912	9.0	12.0	14.0	0.60	5.0
TCRC1012	10.0	12.0	14.0	0.60	5.0
TCRC1016	10.0	16.0	14.0	0.60	5.0

Note: Design as Customer's Requested Specifications.

## ▶ (TCRC0406) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC0406 - 1R0N	1.00	1	0.030	3.00
TCRC0406 - 1R5N	1.50	1	0.035	2.80
TCRC0406 - 1R8N	1.80	1	0.040	2.70
TCRC0406 - 2R2N	2.20	1	0.045	2.50
TCRC0406 - 2R7N	2.70	1	0.050	2.50
TCRC0406 - 3R3N	3.30	1	0.055	2.20
TCRC0406 - 3R9N	3.90	1	0.055	2.20
TCRC0406 - 4R7N	4.70	1	0.065	2.00
TCRC0406 - 5R6N	5.60	1	0.070	1.80
TCRC0406 - 6R8N	6.80	1	0.080	1.70
TCRC0406 - 8R2N	8.20	1	0.090	1.50
TCRC0406 - 100M	10.00	1	0.110	1.40
TCRC0406 - 120M	12.00	1	0.140	1.20
TCRC0406 - 150M	15.00	1	0.160	1.00
TCRC0406 - 180M	18.00	1	0.180	1.00
TCRC0406 - 220M	22.00	1	0.250	0.90
TCRC0406 - 270M	27.00	1	0.370	0.80
TCRC0406 - 330M	33.00	1	0.420	0.70
TCRC0406 - 390M	39.00	1	0.450	0.70
TCRC0406 - 470M	47.00	1	0.500	0.60
TCRC0406 - 560M	56.00	1	0.560	0.60
TCRC0406 - 680M	68.00	1	0.630	0.55
TCRC0406 - 820M	82.00	1	0.770	0.50
TCRC0406 - 101M	100.00	1	0.850	0.40
TCRC0406 - 121M	120.00	1	1.300	0.40
TCRC0406 - 151M	150.00	1	1.400	0.30
TCRC0406 - 181M	180.00	1	2.200	0.30
TCRC0406 - 221M	220.00	1	2.500	0.28
TCRC0406 - 271M	270.00	1	2.700	0.25
TCRC0406 - 331M	330.00	1	3.000	0.22
TCRC0406 - 391M	390.00	1	3.400	0.21
TCRC0406 - 471M	470.00	1	3.900	0.20
TCRC0406 - 561M	560.00	1	5.000	0.16
TCRC0406 - 681M	680.00	1	7.000	0.15
TCRC0406 - 821M	820.00	1	7.700	0.14
TCRC0406 - 102M	1000.00	1	8.700	0.12

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C  
 Inductance drop = 10% typ. at IDC.

## ▶ (TCRC0608) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC0608 - 1R0N	1.00	1	0.015	3.00
TCRC0608 - 1R2N	1.20	1	0.015	2.80
TCRC0608 - 1R5N	1.50	1	0.015	2.70
TCRC0608 - 2R2N	2.20	1	0.015	2.60
TCRC0608 - 2R7N	2.70	1	0.020	2.50
TCRC0608 - 3R3N	3.30	1	0.020	2.50
TCRC0608 - 3R9N	3.90	1	0.025	2.50
TCRC0608 - 4R7N	4.70	1	0.025	2.30
TCRC0608 - 5R6N	5.60	1	0.030	2.10
TCRC0608 - 6R8N	6.80	1	0.030	1.80
TCRC0608 - 8R2N	8.20	1	0.035	1.20
TCRC0608 - 100M	10.00	1	0.045	1.00
TCRC0608 - 120M	12.00	1	0.050	1.00
TCRC0608 - 150M	15.00	1	0.055	0.90
TCRC0608 - 180M	18.00	1	0.090	0.90
TCRC0608 - 220M	22.00	1	0.095	0.80
TCRC0608 - 270M	27.00	1	0.110	0.75
TCRC0608 - 330M	33.00	1	0.125	0.70
TCRC0608 - 390M	39.00	1	0.140	0.65
TCRC0608 - 470M	47.00	1	0.160	0.60
TCRC0608 - 560M	56.00	1	0.180	0.60
TCRC0608 - 680M	68.00	1	0.200	0.56
TCRC0608 - 820M	82.00	1	0.270	0.48
TCRC0608 - 101M	100.00	1	0.310	0.45
TCRC0608 - 121M	120.00	1	0.370	0.43
TCRC0608 - 151M	150.00	1	0.470	0.40
TCRC0608 - 181M	180.00	1	0.540	0.40
TCRC0608 - 221M	220.00	1	0.730	0.38
TCRC0608 - 271M	270.00	1	0.830	0.32
TCRC0608 - 331M	330.00	1	0.950	0.30
TCRC0608 - 391M	390.00	1	1.220	0.25
TCRC0608 - 471M	470.00	1	1.630	0.22
TCRC0608 - 561M	560.00	1	1.800	0.20
TCRC0608 - 681M	680.00	1	2.100	0.18
TCRC0608 - 821M	820.00	1	2.900	0.17
TCRC0608 - 102M	1000.00	1	3.200	0.15

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C  
 Inductance drop = 10% typ. at IDC.

## ▶ (TCRC0810) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC0810 - 1R0N	1.00	1	0.015	4.50
TCRC0810 - 1R5N	1.50	1	0.020	4.50
TCRC0810 - 2R2N	2.20	1	0.020	4.20
TCRC0810 - 2R7N	2.70	1	0.020	4.20
TCRC0810 - 3R3N	3.30	1	0.020	4.00
TCRC0810 - 3R9N	3.90	1	0.020	4.00
TCRC0810 - 4R7N	4.70	1	0.025	4.00
TCRC0810 - 5R6N	5.60	1	0.025	4.00
TCRC0810 - 6R8N	6.80	1	0.025	4.00
TCRC0810 - 8R2N	8.20	1	0.035	3.80
TCRC0810 - 100M	10.00	1	0.040	3.80
TCRC0810 - 120M	12.00	1	0.040	3.20
TCRC0810 - 150M	15.00	1	0.045	2.80
TCRC0810 - 180M	18.00	1	0.060	2.50
TCRC0810 - 220M	22.00	1	0.070	2.10
TCRC0810 - 270M	27.00	1	0.085	2.00
TCRC0810 - 330M	33.00	1	0.090	1.80
TCRC0810 - 390M	39.00	1	0.100	1.60
TCRC0810 - 470M	47.00	1	0.110	1.50
TCRC0810 - 560M	56.00	1	0.150	1.30
TCRC0810 - 680M	68.00	1	0.190	1.00
TCRC0810 - 820M	82.00	1	0.210	0.90
TCRC0810 - 101M	100.00	1	0.240	0.80
TCRC0810 - 121M	120.00	1	0.260	0.80
TCRC0810 - 151M	150.00	1	0.310	0.75
TCRC0810 - 181M	180.00	1	0.380	0.70
TCRC0810 - 221M	220.00	1	0.430	0.65
TCRC0810 - 271M	270.00	1	0.490	0.63
TCRC0810 - 331M	330.00	1	0.660	0.60
TCRC0810 - 391M	390.00	1	0.790	0.58
TCRC0810 - 471M	470.00	1	0.910	0.52
TCRC0810 - 561M	560.00	1	1.130	0.50
TCRC0810 - 681M	680.00	1	1.300	0.40
TCRC0810 - 821M	820.00	1	1.530	0.30
TCRC0810 - 102M	1000.00	1	1.800	0.27

**Note:** Test Freq.: 1KHz / 0.25V.

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

## ▶ (TCRC0912) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC0912 - 1R0N	1.00	1	0.015	5.00
TCRC0912 - 1R5N	1.50	1	0.015	5.00
TCRC0912 - 1R8N	1.80	1	0.015	5.00
TCRC0912 - 2R2N	2.20	1	0.015	5.00
TCRC0912 - 3R3N	3.30	1	0.020	4.80
TCRC0912 - 3R9N	3.90	1	0.020	4.80
TCRC0912 - 4R7N	4.70	1	0.020	4.50
TCRC0912 - 5R6N	5.60	1	0.025	4.00
TCRC0912 - 6R8N	6.80	1	0.025	3.90
TCRC0912 - 8R2N	8.20	1	0.025	3.50
TCRC0912 - 100M	10.00	1	0.030	3.40
TCRC0912 - 120M	12.00	1	0.030	3.20
TCRC0912 - 150M	15.00	1	0.040	3.00
TCRC0912 - 180M	18.00	1	0.045	2.80
TCRC0912 - 220M	22.00	1	0.050	2.70
TCRC0912 - 270M	27.00	1	0.055	2.50
TCRC0912 - 330M	33.00	1	0.055	2.50
TCRC0912 - 390M	39.00	1	0.060	2.00
TCRC0912 - 470M	47.00	1	0.070	1.80
TCRC0912 - 560M	56.00	1	0.080	1.70
TCRC0912 - 680M	68.00	1	0.090	1.50
TCRC0912 - 820M	82.00	1	0.110	1.40
TCRC0912 - 101M	100.00	1	0.160	1.20
TCRC0912 - 121M	120.00	1	0.170	1.10
TCRC0912 - 151M	150.00	1	0.200	1.00
TCRC0912 - 181M	180.00	1	0.220	0.90
TCRC0912 - 221M	220.00	1	0.260	0.80
TCRC0912 - 271M	270.00	1	0.390	0.70
TCRC0912 - 331M	330.00	1	0.450	0.50
TCRC0912 - 391M	390.00	1	0.490	0.45
TCRC0912 - 471M	470.00	1	0.620	0.43
TCRC0912 - 561M	560.00	1	0.640	0.40
TCRC0912 - 681M	680.00	1	0.790	0.38
TCRC0912 - 821M	820.00	1	1.340	0.35
TCRC0912 - 102M	1000.00	1	1.820	0.30

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C  
 Inductance drop = 10% typ. at IDC.

## ▶ (TCRC1012) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC1012 - 1R0N	1.00	1	0.010	6.00
TCRC1012 - 1R5N	1.50	1	0.010	6.00
TCRC1012 - 1R8N	1.80	1	0.015	6.00
TCRC1012 - 2R7N	2.70	1	0.015	5.50
TCRC1012 - 3R3N	3.30	1	0.015	5.50
TCRC1012 - 3R9N	3.90	1	0.020	5.00
TCRC1012 - 4R7N	4.70	1	0.020	5.00
TCRC1012 - 5R6N	5.60	1	0.025	4.80
TCRC1012 - 6R8N	6.80	1	0.025	4.80
TCRC1012 - 8R2N	8.20	1	0.025	4.50
TCRC1012 - 100M	10.00	1	0.025	4.50
TCRC1012 - 120M	12.00	1	0.025	4.30
TCRC1012 - 150M	15.00	1	0.035	4.30
TCRC1012 - 180M	18.00	1	0.040	4.00
TCRC1012 - 220M	22.00	1	0.045	3.70
TCRC1012 - 270M	27.00	1	0.045	3.50
TCRC1012 - 330M	33.00	1	0.055	3.00
TCRC1012 - 390M	39.00	1	0.060	2.50
TCRC1012 - 470M	47.00	1	0.080	2.30
TCRC1012 - 560M	56.00	1	0.085	2.00
TCRC1012 - 680M	68.00	1	0.095	2.00
TCRC1012 - 820M	82.00	1	0.110	1.80
TCRC1012 - 101M	100.00	1	0.140	1.70
TCRC1012 - 121M	120.00	1	0.160	1.50
TCRC1012 - 151M	150.00	1	0.180	1.40
TCRC1012 - 181M	180.00	1	0.250	1.30
TCRC1012 - 221M	220.00	1	0.280	1.00
TCRC1012 - 271M	270.00	1	0.420	0.90
TCRC1012 - 331M	330.00	1	0.540	0.80
TCRC1012 - 391M	390.00	1	0.600	0.80
TCRC1012 - 471M	470.00	1	0.660	0.70
TCRC1012 - 561M	560.00	1	0.740	0.60
TCRC1012 - 681M	680.00	1	0.840	0.50
TCRC1012 - 821M	820.00	1	1.080	0.50
TCRC1012 - 102M	1000.00	1	1.390	0.50

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C  
 Inductance drop = 10% typ. at IDC.

## ▶ (TCRC1016) Electrical Characteristics

Part Number	Inductance( $\mu$ H)	Test Freq.(KHz)	DCR ( $\Omega$ )(max)	IDC (A)(max)
TCRC1016 - 1R0N	1.00	1	0.010	9.00
TCRC1016 - 1R5N	1.50	1	0.015	9.00
TCRC1016 - 1R8N	1.80	1	0.015	9.00
TCRC1016 - 2R7N	2.70	1	0.015	9.00
TCRC1016 - 3R3N	3.30	1	0.015	8.50
TCRC1016 - 3R9N	3.90	1	0.015	8.00
TCRC1016 - 4R7N	4.70	1	0.020	7.50
TCRC1016 - 5R6N	5.60	1	0.025	7.50
TCRC1016 - 6R8N	6.80	1	0.025	7.50
TCRC1016 - 8R2N	8.20	1	0.025	7.20
TCRC1016 - 100M	10.00	1	0.030	7.20
TCRC1016 - 120M	12.00	1	0.030	7.00
TCRC1016 - 150M	15.00	1	0.035	6.50
TCRC1016 - 180M	18.00	1	0.035	6.30
TCRC1016 - 220M	22.00	1	0.045	5.50
TCRC1016 - 270M	27.00	1	0.050	4.50
TCRC1016 - 330M	33.00	1	0.070	4.00
TCRC1016 - 390M	39.00	1	0.070	3.80
TCRC1016 - 470M	47.00	1	0.070	3.60
TCRC1016 - 560M	56.00	1	0.080	3.20
TCRC1016 - 680M	68.00	1	0.090	3.00
TCRC1016 - 820M	82.00	1	0.095	2.60
TCRC1016 - 101M	100.00	1	0.120	2.50
TCRC1016 - 121M	120.00	1	0.140	2.30
TCRC1016 - 151M	150.00	1	0.170	2.10
TCRC1016 - 181M	180.00	1	0.190	2.00
TCRC1016 - 221M	220.00	1	0.250	1.80
TCRC1016 - 271M	270.00	1	0.340	1.50
TCRC1016 - 331M	330.00	1	0.450	1.50
TCRC1016 - 391M	390.00	1	0.510	1.30
TCRC1016 - 471M	470.00	1	0.560	1.20
TCRC1016 - 561M	560.00	1	0.640	1.00
TCRC1016 - 681M	680.00	1	0.710	1.00
TCRC1016 - 821M	820.00	1	1.010	0.90
TCRC1016 - 102M	1000.00	1	1.200	0.80

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C  
 Inductance drop = 10% typ. at IDC.



## ▶ How to Order

TCRC

❶

UL

❷

0406

❸

1R0

❹

M

❺

❶ Part Number: TCRC

❷ TUBE

Code	TUBE
V	UL
P	PVC
NONE	NO TUBE

❸ Size

Code	Size
0406	6.0×9.5mm
0608	8.0×11.5mm
0810	10.0×14.0mm
0912	11.0×16.5mm
1012	12.0×16.5mm
1016	12.5×21.0mm

❹ Inductance

Code	Inductance
1R0	1.00μH
100	10.00μH
101	100.00μH
102	1000.00μH

❺ Tolerance

Code	Tolerance
J	5%
K	10%
L	15%
M	20%
N	30%
Y	min

*Back to 1st Page - Choke Coil Inductors Radial (TCRC)*