

Coil Choke Inductors

Radial Choke Coils with open magnetic circuit construction design makes better TCR (TCRB)

▶ Preview

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

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.

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

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

Features :

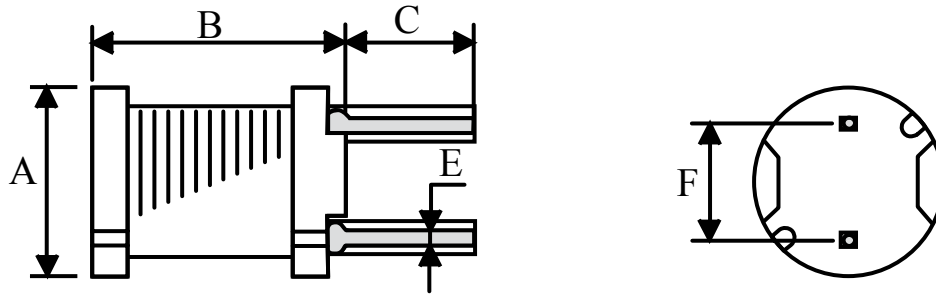
- Open magnetic circuit construction
- Low cost and high reliability

Applications :

- Video Camera, Video Tape Recorder,
- Notebook, Inkjet Printer, Copying Machine,
- Display Monitor, Cellular Phone, ADSL Modem,
- Microwave Oven, Lighting and Car Electronics.



Configurations & Dimensions



| Type | $\Phi A(\text{max})$ | B(max) | $C \pm 1.0$ | $E \pm 0.05$ | $F \pm 0.5$ |
|----------|----------------------|--------|-------------|--------------|-------------|
| TCRB0605 | 6.5 | 5.5 | 4.0 | 0.50 | 4.0 |
| TCRB0606 | 6.5 | 6.5 | 4.0 | 0.50 | 4.0 |
| TCRB0805 | 8.3 | 5.5 | 5.0 | 0.65 | 5.0 |
| TCRB0807 | 8.3 | 7.5 | 5.0 | 0.65 | 5.0 |
| TCRB0809 | 8.3 | 9.5 | 5.0 | 0.65 | 5.0 |

Note: Design as Customer's Requested Specifications.

TCRB0605) Electrical Characteristics

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|------------------------------|------------------|-----------------------|--------------|
| TCRB0605 - 220M | 22.00 | 1 | 0.180 | 0.90 |
| TCRB0605 - 270M | 27.00 | 1 | 0.210 | 0.81 |
| TCRB0605 - 330M | 33.00 | 1 | 0.270 | 0.74 |
| TCRB0605 - 390M | 39.00 | 1 | 0.290 | 0.68 |
| TCRB0605 - 470M | 47.00 | 1 | 0.340 | 0.62 |
| TCRB0605 - 560M | 56.00 | 1 | 0.420 | 0.57 |
| TCRB0605 - 680M | 68.00 | 1 | 0.480 | 0.51 |
| TCRB0605 - 820M | 82.00 | 1 | 0.550 | 0.47 |
| TCRB0605 - 101M | 100.00 | 1 | 0.680 | 0.42 |
| TCRB0605 - 121M | 120.00 | 1 | 0.770 | 0.39 |
| TCRB0605 - 151M | 150.00 | 1 | 0.950 | 0.35 |
| TCRB0605 - 181M | 180.00 | 1 | 1.150 | 0.32 |
| TCRB0605 - 221M | 220.00 | 1 | 1.300 | 0.29 |
| TCRB0605 - 271M | 270.00 | 1 | 1.550 | 0.26 |
| TCRB0605 - 331M | 330.00 | 1 | 2.180 | 0.23 |
| TCRB0605 - 391M | 390.00 | 1 | 2.470 | 0.21 |
| TCRB0605 - 471M | 470.00 | 1 | 2.920 | 0.20 |
| TCRB0605 - 561M | 560.00 | 1 | 3.970 | 0.18 |
| TCRB0605 - 681M | 680.00 | 1 | 4.570 | 0.16 |
| TCRB0605 - 821M | 820.00 | 1 | 5.280 | 0.15 |
| TCRB0605 - 102M | 1000.00 | 1 | 7.060 | 0.13 |

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

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

▶ (TCRB0606) Electrical Characteristics

| Part Number | Inductance (μ H) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|-----------------------|------------------|-----------------------|--------------|
| TCRB0606 - 220M | 22.00 | 1 | 0.110 | 1.27 |
| TCRB0606 - 270M | 27.00 | 1 | 0.140 | 1.14 |
| TCRB0606 - 330M | 33.00 | 1 | 0.170 | 1.03 |
| TCRB0606 - 390M | 39.00 | 1 | 0.190 | 0.95 |
| TCRB0606 - 470M | 47.00 | 1 | 0.230 | 0.87 |
| TCRB0606 - 560M | 56.00 | 1 | 0.260 | 0.80 |
| TCRB0606 - 680M | 68.00 | 1 | 0.280 | 0.72 |
| TCRB0606 - 820M | 82.00 | 1 | 0.390 | 0.66 |
| TCRB0606 - 101M | 100.00 | 1 | 0.430 | 0.59 |
| TCRB0606 - 121M | 120.00 | 1 | 0.540 | 0.54 |
| TCRB0606 - 151M | 150.00 | 1 | 0.640 | 0.48 |
| TCRB0606 - 181M | 180.00 | 1 | 0.740 | 0.44 |
| TCRB0606 - 221M | 220.00 | 1 | 0.960 | 0.40 |
| TCRB0606 - 271M | 270.00 | 1 | 1.120 | 0.36 |
| TCRB0606 - 331M | 330.00 | 1 | 1.480 | 0.33 |
| TCRB0606 - 391M | 390.00 | 1 | 1.660 | 0.30 |
| TCRB0606 - 471M | 470.00 | 1 | 1.910 | 0.27 |
| TCRB0606 - 561M | 560.00 | 1 | 2.310 | 0.25 |
| TCRB0606 - 681M | 680.00 | 1 | 2.670 | 0.23 |
| TCRB0606 - 821M | 820.00 | 1 | 3.100 | 0.21 |
| TCRB0606 - 102M | 1000.00 | 1 | 4.450 | 0.19 |

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

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

▶ (TCRB0805) Electrical Characteristics

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|------------------------------|------------------|-----------------------|--------------|
| TCRB0805 - 100M | 10.00 | 1 | 0.070 | 2.50 |
| TCRB0805 - 120M | 12.00 | 1 | 0.080 | 2.40 |
| TCRB0805 - 150M | 15.00 | 1 | 0.090 | 2.10 |
| TCRB0805 - 180M | 18.00 | 1 | 0.100 | 2.00 |
| TCRB0805 - 220M | 22.00 | 1 | 0.120 | 1.70 |
| TCRB0805 - 270M | 27.00 | 1 | 0.140 | 1.60 |
| TCRB0805 - 330M | 33.00 | 1 | 0.170 | 1.40 |
| TCRB0805 - 390M | 39.00 | 1 | 0.210 | 1.30 |
| TCRB0805 - 470M | 47.00 | 1 | 0.240 | 1.20 |
| TCRB0805 - 560M | 56.00 | 1 | 0.310 | 1.10 |
| TCRB0805 - 680M | 68.00 | 1 | 0.340 | 1.00 |
| TCRB0805 - 820M | 82.00 | 1 | 0.400 | 0.93 |
| TCRB0805 - 101M | 100.00 | 1 | 0.520 | 0.81 |
| TCRB0805 - 121M | 120.00 | 1 | 0.590 | 0.76 |
| TCRB0805 - 151M | 150.00 | 1 | 0.710 | 0.67 |
| TCRB0805 - 181M | 180.00 | 1 | 0.890 | 0.62 |
| TCRB0805 - 221M | 220.00 | 1 | 1.040 | 0.54 |
| TCRB0805 - 271M | 270.00 | 1 | 1.280 | 0.49 |
| TCRB0805 - 331M | 330.00 | 1 | 1.470 | 0.44 |
| TCRB0805 - 391M | 390.00 | 1 | 1.670 | 0.41 |
| TCRB0805 - 471M | 470.00 | 1 | 1.950 | 0.38 |
| TCRB0805 - 561M | 560.00 | 1 | 2.830 | 0.35 |
| TCRB0805 - 681M | 680.00 | 1 | 3.250 | 0.32 |
| TCRB0805 - 821M | 820.00 | 1 | 3.820 | 0.31 |
| TCRB0805 - 102M | 1000.00 | 1 | 5.280 | 0.25 |
| TCRB0805 - 122M | 1200.00 | 1 | 6.030 | 0.23 |
| TCRB0805 - 152M | 1500.00 | 1 | 7.150 | 0.21 |
| TCRB0805 - 182M | 1800.00 | 1 | 8.260 | 0.20 |
| TCRB0805 - 222M | 2200.00 | 1 | 11.100 | 0.18 |
| TCRB0805 - 272M | 2700.00 | 1 | 13.100 | 0.16 |
| TCRB0805 - 332M | 3300.00 | 1 | 15.900 | 0.14 |
| TCRB0805 - 392M | 3900.00 | 1 | 18.000 | 0.13 |
| TCRB0805 - 472M | 4700.00 | 1 | 23.900 | 0.12 |
| TCRB0805 - 562M | 5600.00 | 1 | 26.800 | 0.11 |
| TCRB0805 - 682M | 6800.00 | 1 | 31.700 | 0.098 |
| TCRB0805 - 822M | 8200.00 | 1 | 46.500 | 0.088 |
| TCRB0805 - 103M | 10000.00 | 1 | 55.700 | 0.081 |

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

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

▶ (TCRB0807) Electrical Characteristics

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|------------------------------|------------------|-----------------------|--------------|
| TCRB0807 - 100M | 10.00 | 1 | 0.050 | 2.90 |
| TCRB0807 - 120M | 12.00 | 1 | 0.060 | 2.50 |
| TCRB0807 - 150M | 15.00 | 1 | 0.070 | 2.20 |
| TCRB0807 - 180M | 18.00 | 1 | 0.080 | 1.90 |
| TCRB0807 - 220M | 22.00 | 1 | 0.090 | 1.80 |
| TCRB0807 - 270M | 27.00 | 1 | 0.110 | 1.70 |
| TCRB0807 - 330M | 33.00 | 1 | 0.130 | 1.50 |
| TCRB0807 - 390M | 39.00 | 1 | 0.140 | 1.30 |
| TCRB0807 - 470M | 47.00 | 1 | 0.150 | 1.30 |
| TCRB0807 - 560M | 56.00 | 1 | 0.180 | 1.20 |
| TCRB0807 - 680M | 68.00 | 1 | 0.200 | 1.10 |
| TCRB0807 - 820M | 82.00 | 1 | 0.240 | 1.00 |
| TCRB0807 - 101M | 100.00 | 1 | 0.280 | 0.89 |
| TCRB0807 - 121M | 120.00 | 1 | 0.360 | 0.81 |
| TCRB0807 - 151M | 150.00 | 1 | 0.420 | 0.72 |
| TCRB0807 - 181M | 180.00 | 1 | 0.570 | 0.66 |
| TCRB0807 - 221M | 220.00 | 1 | 0.630 | 0.57 |
| TCRB0807 - 271M | 270.00 | 1 | 0.880 | 0.51 |
| TCRB0807 - 331M | 330.00 | 1 | 1.050 | 0.46 |
| TCRB0807 - 391M | 390.00 | 1 | 1.170 | 0.44 |
| TCRB0807 - 471M | 470.00 | 1 | 1.340 | 0.41 |
| TCRB0807 - 561M | 560.00 | 1 | 1.720 | 0.36 |
| TCRB0807 - 681M | 680.00 | 1 | 1.960 | 0.33 |
| TCRB0807 - 821M | 820.00 | 1 | 2.560 | 0.30 |
| TCRB0807 - 102M | 1000.00 | 1 | 2.940 | 0.27 |
| TCRB0807 - 122M | 1200.00 | 1 | 4.040 | 0.24 |
| TCRB0807 - 152M | 1500.00 | 1 | 4.700 | 0.22 |
| TCRB0807 - 182M | 1800.00 | 1 | 5.050 | 0.20 |
| TCRB0807 - 222M | 2200.00 | 1 | 6.250 | 0.18 |
| TCRB0807 - 272M | 2700.00 | 1 | 8.720 | 0.16 |
| TCRB0807 - 332M | 3300.00 | 1 | 10.600 | 0.15 |
| TCRB0807 - 392M | 3900.00 | 1 | 14.200 | 0.14 |
| TCRB0807 - 472M | 4700.00 | 1 | 16.700 | 0.12 |
| TCRB0807 - 562M | 5600.00 | 1 | 18.700 | 0.11 |
| TCRB0807 - 682M | 6800.00 | 1 | 21.800 | 0.10 |
| TCRB0807 - 822M | 8200.00 | 1 | 28.700 | 0.093 |
| TCRB0807 - 103M | 10000.00 | 1 | 33.000 | 0.084 |

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

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

▶ (TCRB0809) Electrical Characteristics

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|-----------------|------------------|--------------|--------------|
| TCRB0809 - 100M | 10.00 | 1 | 0.040 | 2.60 |
| TCRB0809 - 120M | 12.00 | 1 | 0.040 | 2.60 |
| TCRB0809 - 150M | 15.00 | 1 | 0.050 | 2.10 |
| TCRB0809 - 180M | 18.00 | 1 | 0.050 | 2.00 |
| TCRB0809 - 220M | 22.00 | 1 | 0.060 | 1.70 |
| TCRB0809 - 270M | 27.00 | 1 | 0.060 | 1.60 |
| TCRB0809 - 330M | 33.00 | 1 | 0.070 | 1.40 |
| TCRB0809 - 390M | 39.00 | 1 | 0.080 | 1.40 |
| TCRB0809 - 470M | 47.00 | 1 | 0.100 | 1.30 |
| TCRB0809 - 560M | 56.00 | 1 | 0.110 | 1.20 |
| TCRB0809 - 680M | 68.00 | 1 | 0.140 | 1.10 |
| TCRB0809 - 820M | 82.00 | 1 | 0.160 | 1.00 |
| TCRB0809 - 101M | 100.00 | 1 | 0.190 | 0.90 |
| TCRB0809 - 121M | 120.00 | 1 | 0.220 | 0.82 |
| TCRB0809 - 151M | 150.00 | 1 | 0.270 | 0.74 |
| TCRB0809 - 181M | 180.00 | 1 | 0.310 | 0.71 |
| TCRB0809 - 221M | 220.00 | 1 | 0.380 | 0.64 |
| TCRB0809 - 271M | 270.00 | 1 | 0.530 | 0.57 |
| TCRB0809 - 331M | 330.00 | 1 | 0.610 | 0.51 |
| TCRB0809 - 391M | 390.00 | 1 | 0.690 | 0.48 |
| TCRB0809 - 471M | 470.00 | 1 | 0.890 | 0.43 |
| TCRB0809 - 561M | 560.00 | 1 | 1.010 | 0.40 |
| TCRB0809 - 681M | 680.00 | 1 | 1.180 | 0.35 |
| TCRB0809 - 821M | 820.00 | 1 | 1.570 | 0.32 |
| TCRB0809 - 102M | 1000.00 | 1 | 1.840 | 0.30 |
| TCRB0809 - 122M | 1200.00 | 1 | 2.100 | 0.27 |
| TCRB0809 - 152M | 1500.00 | 1 | 2.800 | 0.23 |
| TCRB0809 - 182M | 1800.00 | 1 | 3.210 | 0.21 |
| TCRB0809 - 222M | 2200.00 | 1 | 4.210 | 0.19 |
| TCRB0809 - 272M | 2700.00 | 1 | 4.940 | 0.17 |
| TCRB0809 - 332M | 3300.00 | 1 | 6.160 | 0.15 |
| TCRB0809 - 392M | 3900.00 | 1 | 6.840 | 0.14 |
| TCRB0809 - 472M | 4700.00 | 1 | 7.890 | 0.13 |
| TCRB0809 - 562M | 5600.00 | 1 | 11.500 | 0.12 |
| TCRB0809 - 682M | 6800.00 | 1 | 13.200 | 0.11 |
| TCRB0809 - 822M | 8200.00 | 1 | 15.200 | 0.10 |
| TCRB0809 - 103M | 10000.00 | 1 | 22.000 | 0.089 |
| TCRB0809 - 123M | 12000.00 | 1 | 25.000 | 0.073 |
| TCRB0809 - 153M | 15000.00 | 1 | 29.100 | 0.068 |
| TCRB0809 - 183M | 18000.00 | 1 | 38.900 | 0.066 |

Continued on the following page. 

↑ Continued from the preceding page.

| Part Number | Inductance (μH) | Test Freq. (KHz) | DCR (Ω)(max) | IDC (A)(max) |
|-----------------|-----------------|------------------|--------------|--------------|
| TCRB0809 - 223M | 22000.00 | 1 | 44.900 | 0.059 |
| TCRB0809 - 273M | 27000.00 | 1 | 55.700 | 0.052 |
| TCRB0809 - 333M | 33000.00 | 1 | 64.200 | 0.048 |
| TCRB0809 - 393M | 39000.00 | 1 | 74.200 | 0.042 |
| TCRB0809 - 473M | 47000.00 | 1 | 96.400 | 0.038 |

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

Operating Temp.: -40°C ~ +85°C

Inductance drop = 10% typ. at IDC.

▶ How to Order

TCRB

❶

UL

❷

0605

❸

220

❹

220

❺

❶ Part Number: TCRB

❷ TUBE

| Code | TUBE |
|------|---------|
| V | UL |
| P | PVC |
| NONE | NO TUBE |

❸ Size

| Code | Size |
|------|-------------|
| 0605 | 6.50×5.5mm |
| 0606 | 6.50×6.50mm |
| 0805 | 8.30×5.5mm |
| 0807 | 8.30×7.50mm |
| 0809 | 8.30×9.50mm |

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 - Coil Choke Inductors Radial (TCRB)