

# **Iron Power Chokes T Series**

# T Series Toroid Type (環型電感器)

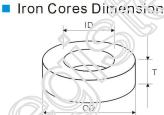
### Configuration & Dimensions: (mm)

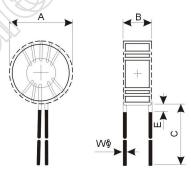
#### Features

- High Maximum Flux Density
- Low Cost
- Large Energy Storage Capacity

### **Applications**

- High Frequency Chokes
- Conducted EMI Noise Filters
- **Pulse Transformers**
- DC Output/Input Filters
- Light Dimmer Chokes
- Power Factor Correction Inductors
- Continuous-mode Fly-back Inductors
- Output Chokes for Switching Power Supplies
- Power Chokes Inductor Inductance: 1 µ H~20mH Current: 0.1A~30A
- Common Mode Inductor Inductance: 1 µ H~2mH Current: 0.1A~30A





### **Material Description**

- -2/-14 (A) Materials The low permeability of these materials will result in lower operating AC flux density than with other materials with no additional gap-loss. The -14Material is similar to -2 Material with slightly higher permeability.
- -2/-93 (B) Materials with its good linearity at high bias current is a less expensive alternative for -2 Material. It is suitable for applications that care less about the high frequency core less.
- -8 Material This material has low core loss and good linearity under high bias conditions. A good high frequency material. The highest cost material.
- -8/93 (C) Material is a less expensive alternative for -8 Material, the core loss is close to -8 Material and the linearity at high bias current is very good.
- -18(D) Material This material has low core loss similar to the -8 Material with higher permeability and a lower cost. Good DC saturation characteristics.
- -19(E) Material An inexpensive alternate to the -18 Material with the same pemeability and some what higher core losses.
- -26(F) Material The most popular material. It is a cost effective general purpose material that is useful in a wide variety of power conversion and line filter applications.
- -28(G)/-30(H) Materials The good linearity, low cost, and relatively low permeability of this material make it popular in large sizes for high power UPS chokes.
- -33(I)/-34(J)/-35(K) Materials An inexpensive alternate to the -8Material for applications where high frequency core loss is not critica. Good linearity with high bias.
- -38(L) Material with its high magnetic permeability, is a low budget alternate of -26Material. Ia is the best choice for linear frequency application.
- -40(M) Material The least expensive material. It has characteristics quite similar to the very popular -26 Material Popular in large sizes.
- -45(N)Material The highest permeability material. A high permeability alternate to -52Material with sightly hightly higher core losses.
- -52(P)Material This material has lower core loss at high frequency and the same permeability as the -26 Material. It is very popular for high frequency choke designs.

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# **Cores Dimensions**

Cores	OD	ID	Т
code	in/mm	in/mm	in/mm
16A	.160/4.06	.078/1.98	.060/1.52
20C	.200/5.08	.088/2.24	.070/1.78
25A	.225/6.48	.120/3.05	.096/2.44
30C	.307/7.80	.151/3.84	.128/3.25
38A	.375/9.53	.175/4.45	.190/4.83
44A	.440/11.2	.229/5.82	.159/4.04
44B	.440/11.2	.229/5.82	.250/6.35
44C	.440/11.2	.229/5.82	.338/8.59
50A	.500/12.7	.303/7.70	.190/4.83
50B	.500/12.7	.303/7.70	.250/6.35
50C	.500/12.7	.303/7.70	.335/8.51
50D	.500/12.7	.200/7.70	375/9.53
60A	.600/15.2	.336/8.53	.234/5.94
60B	.600/15.2	.336/8.53	.470/11.9
60C	.600/15.2	.336/8.53	.470/11.9
68A	.690/17.5	.370/9.40	.190/4.83
80A	.795/20.2	.495/12.6	.250/6.35
80B	.795/20.2	.495/12.6	.375/9.53
80C	.795/20.2	.495/12.6	.500/12.7
90A	.900/22.9	.550/14.0	.375/9.53
10A	1.060/26.9	.570/14.5	.437/11.1
10B	1.060/26.9	570/14.5	.312/7.92
10C	1.060/26.9	570/14.5	.575/14.6
13A	1.300/33.0	.780/19.8	.437/11.1
13B	1.300/33.0	.780/19.8	.225/5.72
157	1.570/39.9	.950/24.1	.570/14.5
175	1.750/44.5	1.070/27.2	.650/16.5
20A	2.000/50.8	1.250/31.8	.550/14.0
20B	2.000/50.8	1.250/31.8	1.000/25.4
22A	2.250/57.2	1.405/35.7	.550/14.0
22B	2.250/57 2	1.405/35.7	1.000/25.4
250	2.500/63.5	1.250/31.8	1.000/25.4
30A	3.040/77.2	1.930/49.0	.500/12.7
30B	3.040/77.2	1.930/49.0	1.000/25.4
40A	4.009/102	2.250/57.2	.650/16.5
40B	4.000/102	2.250/57.2	1.000/25.4
40C	4.000/102	2.250/57.2	1.300/33.0
52A	5.200/132	3.080/78.2	.800/20.3
52B	5.200/132	3.080/78.2	1.600/40.6
650	6.500/165	3.500/88.9	2.000/50.8

# Materials:

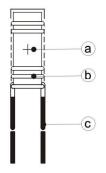
a.Core : Iron powder TR core b.Wire : Enamelled copper wire c.Lead : Tinned copper wire

## Schematic Diagram:



### General Specification:

a.Storage temp: -25°C---+85°C b.Operating temp: -20°C---+80°C c.Temp.fise: 40°C max. At rated current.



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