

Ferrite Cores for Coil

DR, FT, THP P, TH Series

MATERIAL CHARACTERISTICS

Recommended Material	Practical frequency (MHz)	Initial permeability μ_i	Relative loss factor $\tan\delta/\mu_i$ $\times 10^{-6}$	Temperature factor of initial permeability $\alpha_{\mu ir}$ $\times 10^{-6}/^{\circ}\text{C}$ [20 to 60°C]	Curie temperature T_c (°C)	Saturation magnetic flux density B_s (mT)	Remanent flux density B_r (mT)	Coercive force H_c (A/m)	Electrical resistivity ρ_v ($\Omega\cdot\text{m}$)	Density d_b (kg/m^3)	Material's feature
L8F	0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 6	>130	320[1.6kA/m]	130	30	10 ⁵	5.1×10 ³	For general purpose
GT2	0.1 to 2	250±25%	<60[2MHz]	9 to 15	>140	310[1.6kA/m]	160	100	10 ⁵	5.1×10 ³	For general purpose
GT3	0.4 to 10	120±25%	<100[10MHz]	8 to 18	>250	400[4kA/m]	240	350	10 ⁵	5.2×10 ³	For general purpose
L7H	0.05 to 1	800±25%	<12[0.05MHz] <80[1MHz]	7 to 15	>180	390[4kA/m]	220	16	10 ⁵	5.1×10 ³	High B_s
L13H	0.05 to 1	500±25%	<55[0.1MHz] <65[1MHz]	15 to 35	>240	460[4kA/m]	320	37	10 ⁵	5.2×10 ³	High B_s
L2H	0.05 to 2	400±25%	<15[0.05MHz] <65[2MHz]	15 to 25	>250	430[4kA/m]	240	35	10 ⁵	5.1×10 ³	High B_s
L20H	0.05 to 2	400±25%	<60[0.05MHz] <80[2MHz]	13 to 19	>300	480[4kA/m]	340	50	>10 ⁵	5.2×10 ³	High B_s
L14H	0.05 to 3	300±25%	<160[0.1MHz] <90[2MHz]	25 to 40	>250	480[4kA/m]	350	65	10 ⁵	5.2×10 ³	High B_s
L11H	0.05 to 3	300±25%	<30[0.05MHz] <60[3MHz]	20 to 30	>250	470[4kA/m]	340	60	>10 ⁵	5.2×10 ³	High B_s
L9H	0.05 to 3	200±25%	<35[0.05MHz] <65[3MHz]	20 to 30	>300	500[12kA/m]	280	64	10 ⁵	5.2×10 ³	High B_s
L6	0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 3	>100	280[1.6kA/m]	105	16	10 ⁵	5×10 ³	Low temperature coefficient
GT1	0.1 to 1.5	500±25%	<350[1.5MHz]	0 to 2	>120	300[1.6kA/m]	90	55	>10 ⁵	5.1×10 ³	Low temperature coefficient
L6N	0.1 to 1.5	400±25%	<15[0.1MHz] <50[1.5MHz]	-1 to 1	>180	350[4kA/m]	180	120	>10 ⁵	5.2×10 ³	Low temperature coefficient
GT8	0.1 to 1.5	300±25%	<350[1.5MHz]	0 to 2	>150	260[1.6kA/m]	105	120	>10 ⁵	5.1×10 ³	Low temperature coefficient
GT4	0.5 to 20	70±25%	<350[20MHz]	-1 to 5	>300	360[4kA/m]	260	700	>10 ⁵	5×10 ³	Low temperature coefficient
GT10	0.5 to 30	45±25%	<350[30MHz]	-5 to 5	>300	320[4kA/m]	250	950	>10 ⁵	5×10 ³	Low temperature coefficient
GT6	10 to 120	12±25%	<1500[120MHz]	-10 to 10	>300	230[8kA/m]	160	2700	>10 ⁵	4.7×10 ³	Low temperature coefficient
GT9	10 to 80	11±25%	<1500[120MHz]	-70 to -30	>300	220[16kA/m]	130	2800	>10 ⁵	4.2×10 ³	Low temperature coefficient

• 1 (mT): 10 (gauss), 1(A/m): 0.012566 (Oersted)

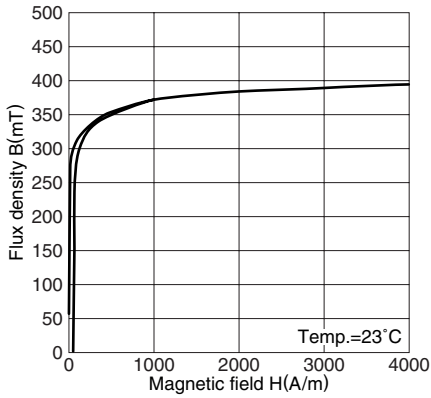
MATERIAL CHARACTERISTICS

Recommended Material	Practical frequency (MHz)	Initial permeability μ_i	Relative loss factor $\tan\delta/\mu_i$ $\times 10^{-6}$	Temperature factor of initial permeability $\alpha_{\mu ir}$ $\times 10^{-6}/^{\circ}\text{C}$ [20 to 60°C]	Curie temperature T_c (°C)	Saturation magnetic flux density B_s (mT)	Remanent flux density B_r (mT)	Coercive force H_c (A/m)	Electrical resistivity ρ_v ($\Omega\cdot\text{m}$)	Density d_b (kg/m^3)	Material's feature
T2F	0.1 to 1.5	400±25%	<25[0.1MHz] <50[1.5MHz]	2 to 8	>170	420[4kA/m]	180	95	10 ⁵	5.2×10 ³	Stress-insensitive
T6F	0.1 to 50	18±25%	<300[0.1MHz] <1000[50MHz]	55 to 65	>250	320[16kA/m]	57	1350	10 ⁵	5.1×10 ³	Stress-insensitive
T7F	0.1 to 100	8±25%	<700[0.1MHz] <1500[100MHz]	15 to 25	>300	220[16kA/m]	130	3500	10 ⁵	5×10 ³	Stress-insensitive
T9F	0.1 to 1000	1	—	—	—	—	—	—	10 ⁵	5.3×10 ³	Stress-insensitive
L17H	0.05 to 0.5	1200±25%	<10[0.05MHz] <45[0.5MHz]	9 to 18	>160	375[4kA/m]	240	10	>10 ⁵	5.2×10 ³	Low loss
L18H	0.05 to 1.0	800±25%	<18[0.05MHz] <140[1.5MHz]	12 to 18	>180	420[4kA/m]	280	13	>10 ⁵	5.2×10 ³	Low loss
L7R	0.05 to 1	750±25%	<90[1MHz]	7 to 15	>180	400[4kA/m]	290	26	10 ⁵	5.2×10 ³	Low loss
SY20	1 to 5	290±25%	<31[1MHz] <600[5MHz]	15 to 25	>150	330[2kA/m]	250	110	10 ⁵	5.1×10 ³	Low loss
SY22	5 to 15	80	<230[1MHz] <100[10MHz]	25 to 45	>250	310[2kA/m]	200	370	>10 ⁵	5.2×10 ³	Low loss
L5	0.1 to 1.5	750±25%	<15[0.1MHz] <280[1.5MHz]	1 to 3	>120	310[1.6kA/m]	105	40	10 ⁵	5×10 ³	High Q
GT5	3 to 80	25±25%	<470[80MHz]	30 to 70	>300	300[4kA/m]	220	1100	10 ⁵	5.1×10 ³	High Q
GT7	10 to 250	9±25%	<1500[250MHz]	100 to 140	>300	180[16kA/m]	110	2900	10 ⁵	5.1×10 ³	High Q

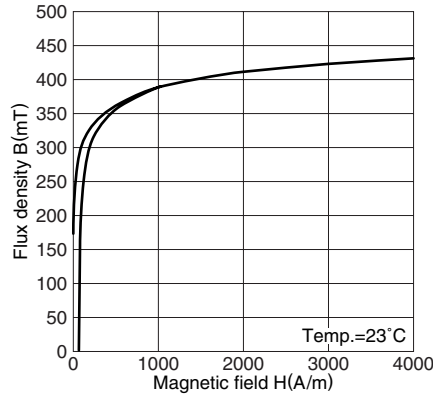
• 1 (mT): 10 (gauss), 1(A/m): 0.012566 (Oersted)

MAGNETIZATION CURVES (TYPICAL)

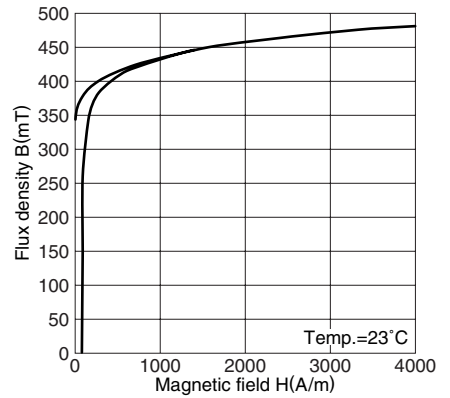
Material: L7H



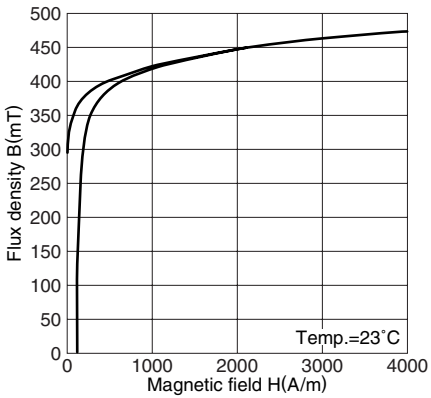
Material: L2H



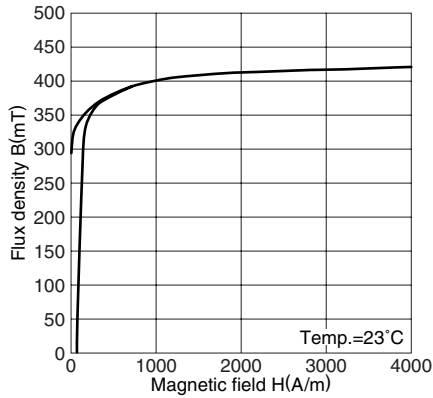
Material: L20H



Material: L9H

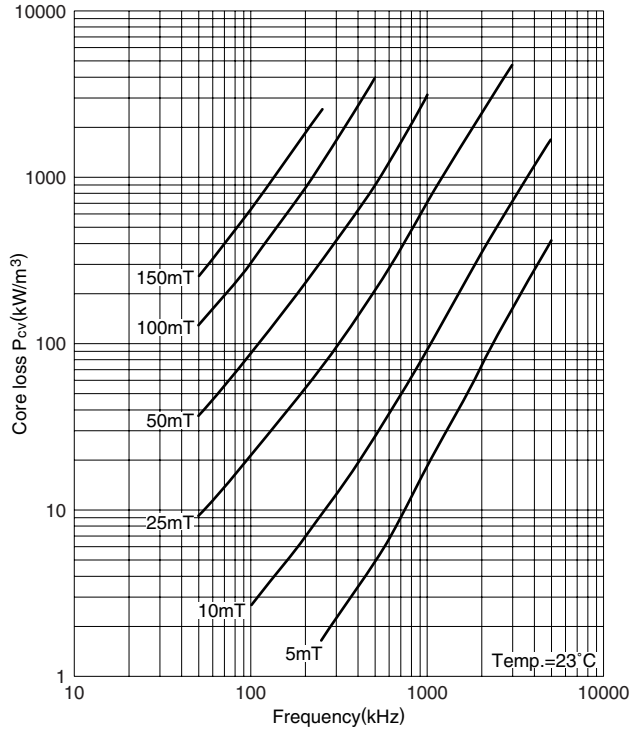


Material: L18H

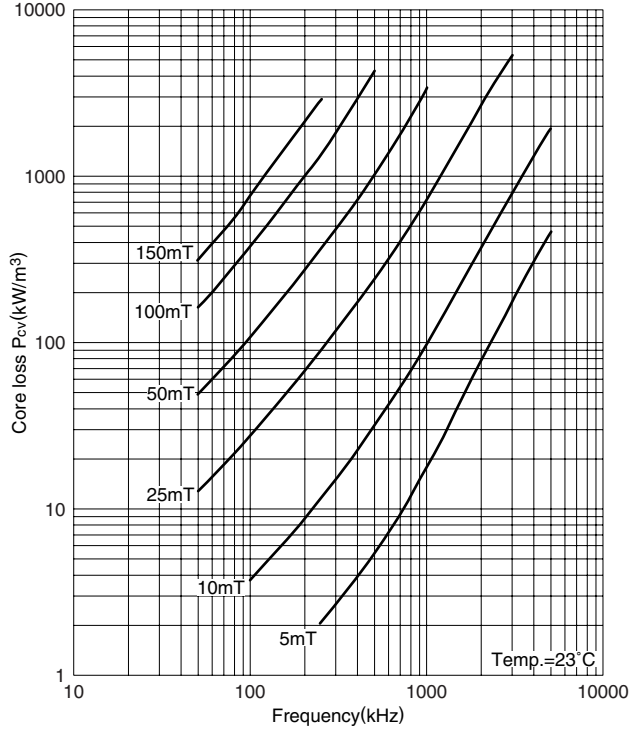


CORE LOSS (TYPICAL)

Material: L17H



Material: L18H

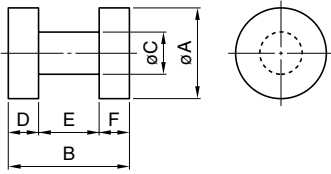


• All specifications are subject to change without notice.

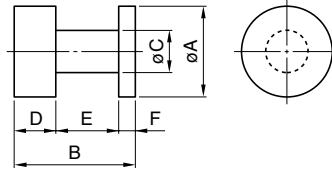
DR SERIES

SHAPES

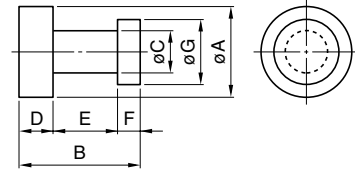
STANDARD TYPE



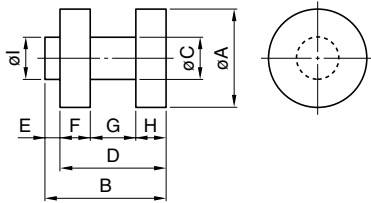
D1 TYPE



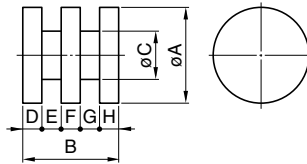
D3 TYPE



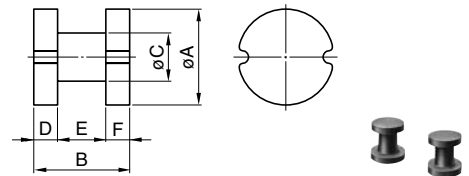
D23 TYPE



MD28 TYPE



M TYPE



PRODUCT IDENTIFICATION

L7H	DR	3 × 1.9	D3
(1)	(2)	(3)	(4) (5)

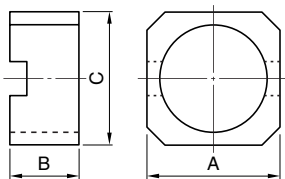
- (1) Material name
 - (2) Series
 - (3) Outer diameter
 - (4) Height
 - (5) Type(In case of standard type, this code is omitted.)
- Please consult us about the size of the details separately.

FT(T) SERIES

T: Round shaped flange type

FT: Square shaped flange type and flange type of other shapes that exempted round shaped flange type

SHAPES



PRODUCT IDENTIFICATION

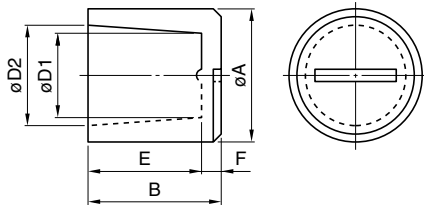
L7H	FT(T)	5 × 2.5 × 3.5	T
(1)	(2)	(3)	(4) (5) (6)

- (1) Material name
 - (2) Series
 - (3) Outer diameter
 - (4) Height
 - (5) Inner diameter
 - (6) In case of convex, concave, and other irregular types(not standard type), this code is added.
- Please consult us about the size of the details separately.

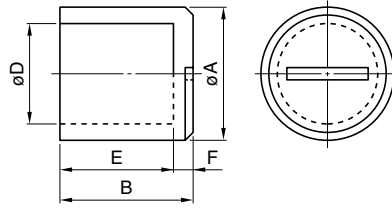
THP SERIES

SHAPES

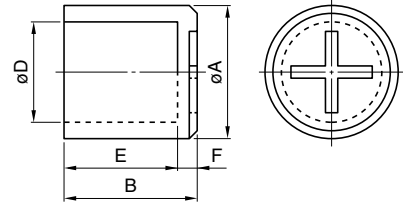
C1 TYPE



C4 TYPE



C7 TYPE



PRODUCT IDENTIFICATION

GT4	THP	3.89 ×	1.37	C8	(OC3, P0.35)
(1)	(2)	(3)	(4)	(5)	(6)



(1) Material name

(2) Series

(3) Outer diameter

(4) Height

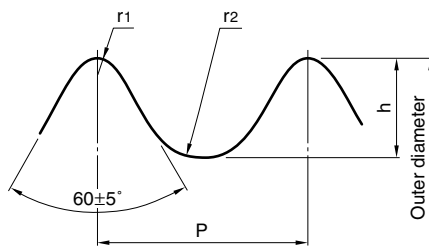
(5) Type

(6) Screw shape

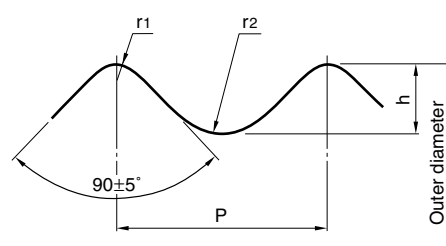
• Please consult us about the size of the details separately.

THREADED DIAGRAMS

OC3 TYPE



OC4 TYPE



Dimensions in mm

P	h	r1	r2 max.
0.35±0.03	0.16+0.1, -0.05	0.06±0.03	0.12
0.5±0.03	0.23+0.1, -0.03	0.06±0.03	0.15
0.6±0.03	0.28+0.1, -0.03	0.07±0.03	0.17
0.75±0.03	0.35+0.14, -0.03	0.08±0.03	0.22

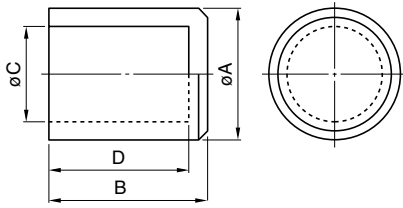
Dimensions in mm

P	h	r1	r2 max.
0.5±0.03	0.17+0.06, -0.03	0.06±0.03	0.15
0.6±0.03	0.2+0.08, -0.03	0.07±0.03	0.18
0.75±0.03	0.25+0.1, -0.03	0.07±0.03	0.22
0.8±0.03	0.28+0.1, -0.03	0.07±0.03	0.22

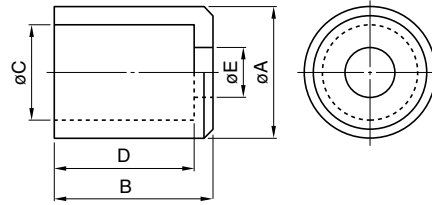
P SERIES(CUP CORE)

SHAPES

STANDARD TYPE



P2 TYPE

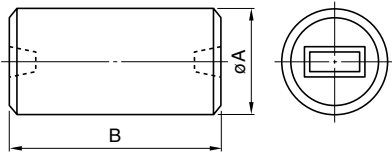


PRODUCT IDENTIFICATION

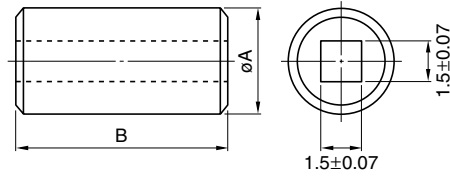
GT5	P	6.9 × 6	P2
(1)	(2)	(3)	(4) (5)

- (1) Material name
 - (2) Series
 - (3) Outer diameter
 - (4) Height
 - (5) Type(In case of standard type, this code is omitted.)
- Please consult us about the size of the details separately.

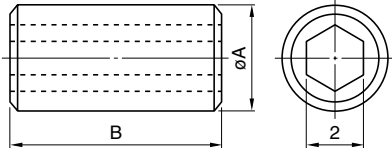
**TH SERIES
STANDARD TYPE**



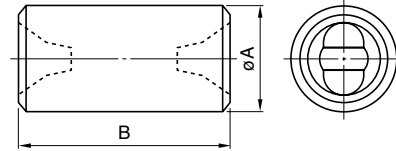
S8 TYPE



S4 TYPE



S14 TYPE



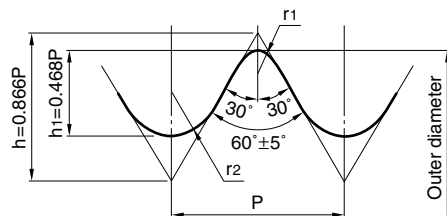
PRODUCT IDENTIFICATION

GT6	TH	4.6 × 8	S4	(OC3, P0.75)
(1)	(2)	(3)	(4)	(5)
				(6)

- (1) Material name
 - (2) Series
 - (3) Outer diameter
 - (4) Height
 - (5) Type(In case of standard type, this code is omitted.)
 - (6) Screw shape
- Please consult us about the size of the details separately.

THREADED DIAGRAM

OC3 TYPE



Dimensions in mm

P±0.03	h	h1	r1	r2 max.
0.35	0.303	0.16+0.1, -0.05	0.06±0.03	0.12
0.5	0.433	0.23+0.1, -0.03	0.06±0.03	0.15
0.6	0.52	0.28+0.1, -0.03	0.07±0.03	0.17
0.75	0.65	0.35+0.14, -0.03	0.08±0.03	0.2
1	0.866	0.47+0.14, -0.03	0.11±0.03	0.29

• Other various shapes are available. Please contact us with your desired shapes and applications.

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