

For Power Supply and Signal Transformer / ENT Series

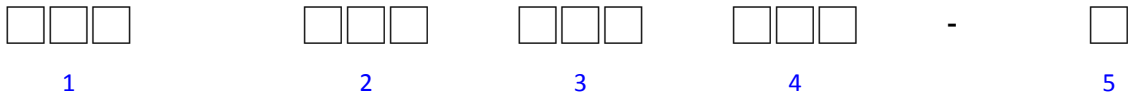
Features

1. High magnetic permeability.
2. Excellent saturation flux density.
3. Low power loss.

Application

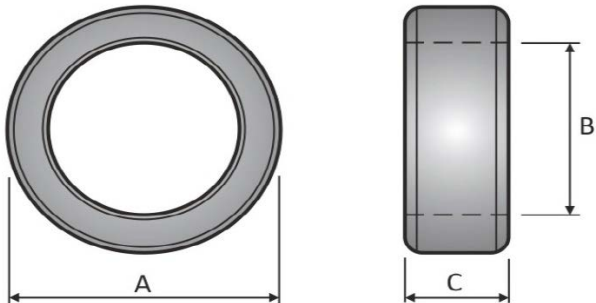
1. Common mode choke for signal line.
2. Filter for video and audio signals.
3. Power supplies, switching circuits.

Product Identification

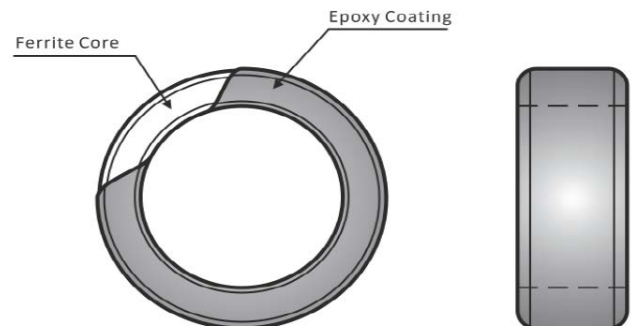


Product Series			Outer Diameter		Inner Diameter		Height		Coating	
ENT	Material	10000 μ i	060	6 mm	030	3 mm	030	3 mm	B	Black
			080	8 mm	040	4 mm	040	3 mm	C	Gray
			080	8 mm	050	5 mm	030	3 mm	G	Green

Shapes And Dimensions



Construction



Material List

No.	Location	Material
1	Ferrite Body	Fe ₂ O ₃
		MnO
		ZnO
2	Epoxy Coating	Epoxy

For Power Supply and Signal Transformer / ENT Series

Dimensions & Characteristics

Unit : mm

Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N ²)	Tolerance
ENT060030030	6.0 ± 0.3	3.0 ± 0.3	3.0 ± 0.2	4200	30%
ENT080040040	8.0 ± 0.3	4.0 ± 0.3	4.0 ± 0.3	5333	30%
ENT080050030	8.0 ± 0.3	5.0 ± 0.3	3.0 ± 0.2	2770	30%
ENT090050030	9.0 ± 0.3	5.0 ± 0.3	3.0 ± 0.2	3500	30%
ENT100050050	10.0 ± 0.3	5.0 ± 0.3	5.0 ± 0.3	6660	30%
ENT100060028	10.0 ± 0.3	6.0 ± 0.3	2.8 ± 0.2	2800	30%
ENT100060035	10.0 ± 0.3	6.0 ± 0.3	3.5 ± 0.2	3500	30%
ENT100060040	10.0 ± 0.3	6.0 ± 0.3	4.0 ± 0.2	4000	30%
ENT100060050	10.0 ± 0.3	6.0 ± 0.3	5.0 ± 0.3	5100	30%
ENT120060040	12.0 ± 0.4	6.0 ± 0.3	4.0 ± 0.3	5100	30%
ENT127079063	12.7 ± 0.4	7.92 ± 0.3	6.35 ± 0.3	6000	30%
ENT130060070	13.0 ± 0.4	6.0 ± 0.3	7.0 ± 0.3	10300	30%
ENT130070050	13.0 ± 0.4	7.0 ± 0.3	5.0 ± 0.3	6000	30%
ENT140080070	14.0 ± 0.4	8.0 ± 0.3	7.0 ± 0.3	7000	30%
ENT140090050	14.0 ± 0.4	9.0 ± 0.3	5.0 ± 0.3	4400	30%
ENT146105037	14.6 ± 0.4	10.5 ± 0.3	3.7 ± 0.3	2400	30%
ENT160080050	16.0 ± 0.4	8.0 ± 0.3	5.0 ± 0.3	6900	30%
ENT160090050	16.0 ± 0.4	9.0 ± 0.3	5.0 ± 0.3	5600	30%
ENT160100070	16.0 ± 0.4	10.0 ± 0.3	7.0 ± 0.3	6450	30%
ENT160120080	16.0 ± 0.4	12.0 ± 0.3	8.0 ± 0.3	4600	30%
ENT180100063	18.0 ± 0.4	10.0 ± 0.3	6.35 ± 0.3	7500	30%
ENT180100100	18.0 ± 0.4	10.0 ± 0.3	10.0 ± 0.3	11800	30%
ENT190110100	19.0 ± 0.4	11.0 ± 0.3	10.0 ± 0.3	10660	30%
ENT190130110	19.0 ± 0.4	13.0 ± 0.3	11.0 ± 0.3	8300	30%
ENT200100070	20.0 ± 0.4	10.0 ± 0.3	7.0 ± 0.3	9340	30%
ENT200100100	20.0 ± 0.4	10.0 ± 0.3	10.0 ± 0.3	13860	30%
EST200120100	20.0 ± 0.4	12.0 ± 0.4	10.0 ± 0.3	10000	30%
ENT220140080	22.0 ± 0.4	14.0 ± 0.4	8.0 ± 0.3	7200	30%
ENT220140100	22.0 ± 0.4	14.0 ± 0.4	10.0 ± 0.3	9000	30%
ENT220140127	22.0 ± 0.4	14.0 ± 0.4	12.7 ± 0.3	11500	30%
ENT250150100	25.0 ± 0.4	15.0 ± 0.4	10.0 ± 0.3	9200	30%
ENT250150120	25.0 ± 0.4	15.0 ± 0.4	12.0 ± 0.3	12000	30%
ENT250150130	25.0 ± 0.4	15.0 ± 0.4	13.0 ± 0.3	13300	30%

For Power Supply and Signal Transformer / ENT Series

1. Dimensions & Characteristics

Unit : mm

Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N ²)	Tolerance
ENT260145200	26.0 ± 0.4	14.5 ± 0.4	20.0 ± 0.4	23000	30%
ENT280124076	28.0 ± 0.4	12.4 ± 0.3	7.6 ± 0.3	10300	30%
ENT280160160	28.0 ± 0.4	16.0 ± 0.4	16.0 ± 0.3	17900	30%
ENT280180130	28.0 ± 0.4	18.0 ± 0.4	13.0 ± 0.3	11000	30%
ENT290180150	29.0 ± 0.5	18.0 ± 0.4	15.0 ± 0.3	14000	30%
ENT290190150	29.0 ± 0.5	19.0 ± 0.4	15.0 ± 0.3	12000	30%
ENT310180140	31.0 ± 0.5	18.0 ± 0.5	14.0 ± 0.4	14000	30%
ENT310190130	31.0 ± 0.5	19.0 ± 0.5	13.0 ± 0.4	12700	30%
ENT310190150	31.0 ± 0.5	19.0 ± 0.5	15.0 ± 0.4	13600	30%
ENT310200150	31.0 ± 0.5	20.0 ± 0.4	15.0 ± 0.4	12000	30%
ENT340218210	34.0 ± 0.6	21.8 ± 0.6	21.4 ± 0.4	18360	30%
ENT360230150	36.0 ± 0.5	23.0 ± 0.5	15.0 ± 0.4	13500	30%
ENT370230150	37.0 ± 0.5	23.0 ± 0.5	15.0 ± 0.4	14000	30%
ENT380190130	38.0 ± 0.5	19.0 ± 0.5	13.0 ± 0.4	17300	30%
ENT380190150	38.0 ± 0.5	19.0 ± 0.5	15.0 ± 0.4	20000	30%
ENT380190210	38.0 ± 0.5	19.0 ± 0.5	21.0 ± 0.4	28000	30%
ENT380205150	38.0 ± 0.5	20.5 ± 0.5	15.0 ± 0.4	18000	30%
ENT380220150	38.0 ± 0.5	22.0 ± 0.5	15.0 ± 0.4	16000	30%
ENT380250150	38.0 ± 0.5	25.0 ± 0.5	15.0 ± 0.4	12380	30%
ENT400230200	40.0 ± 0.8	23.0 ± 0.6	20.0 ± 0.5	21500	30%
ENT400250200	40.0 ± 0.8	25.0 ± 0.6	20.0 ± 0.5	18450	30%
ENT420260180	42.0 ± 0.8	26.0 ± 0.6	18.0 ± 0.6	16941	30%
ENT450300150	45.0 ± 0.8	30.0 ± 0.6	15.0 ± 0.4	12000	30%
ENT470270150	47.0 ± 0.8	27.0 ± 0.6	15.0 ± 0.4	16210	30%
ENT480300100	48.0 ± 1.0	30.0 ± 0.5	10.0 ± 0.3	9230	30%
ENT480300150	48.0 ± 1.0	30.0 ± 0.5	15.0 ± 0.4	14000	30%
ENT490310150	49.0 ± 0.6	31.0 ± 0.6	15.0 ± 0.4	13500	30%
ENT490310188	49.0 ± 0.6	31.0 ± 0.6	18.8 ± 0.4	17100	30%
ENT490318188	49.0 ± 0.6	31.8 ± 0.6	18.8 ± 0.4	17100	30%
ENT490338190	49.0 ± 0.6	33.8 ± 0.6	19.0 ± 0.3	13950	30%
ENT500250200	50.0 ± 1.0	25.0 ± 0.6	20.0 ± 0.6	26666	30%
ENT510310130	51.0 ± 1.0	31.0 ± 0.8	13.0 ± 0.4	12600	30%
ENT560320180	56.0 ± 1.0	32.0 ± 1.0	18.0 ± 0.6	19600	30%

For Power Supply and Signal Transformer / ENT Series

4. Dimensions & Characteristics

Unit : mm

Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N ²)	Tolerance
ENT560360200	56.0 ± 1.0	36.0 ± 1.0	20.0 ± 0.6	17300	30%
ENT580400180	58.0 ± 1.5	40.0 ± 1.0	18.0 ± 0.6	13200	30%
ENT600380200	60.0 ± 1.5	38.0 ± 1.0	20.0 ± 0.6	17950	30%
ENT600400200	60.0 ± 1.5	40.0 ± 1.0	20.0 ± 0.6	16000	30%
ENT630380127	63.0 ± 1.5	38.0 ± 1.0	12.7 ± 0.5	12500	30%
ENT630380250	63.0 ± 1.5	38.0 ± 1.0	25.0 ± 0.8	28300	30%
ENT680440150	68.0 ± 1.5	44.0 ± 0.8	15.0 ± 0.5	12800	30%
ENT740400130	74.0 ± 1.5	40.0 ± 1.0	13.0 ± 0.4	15500	30%
ENT800500200	80.0 ± 1.5	50.0 ± 1.0	20.0 ± 0.8	18000	30%
ENT870540140	87.0 ± 2.0	54.0 ± 2.0	14.0 ± 0.5	13000	30%
ENT870540300	87.0 ± 2.0	54.0 ± 2.0	30.0 ± 1.0	28000	30%

Note :

Specifications which provide more details for the proper and safe use of the described product are available upon request. all specifications are subject to change without notice.

For Power Supply and Signal Transformer / ENT Series

Material Characteristic (Power)

Characteristic	Symbol	Unit	EKT	EQT	EFT	EST	ENT
Initial Permeability ($B \leq 10$ Gauss(0.1mT) , $T=25^\circ\text{C}$)	μ_i		2300 $\pm 25\%$	2500 $\pm 25\%$	5000 $\pm 25\%$	7000 $\pm 30\%$	10000 $\pm 30\%$
Saturation Flux Density at $H=10$ Oe	Bms	Gauss (mT)	4800 (480)	4800 (480)	4300 (430)	4200 (420)	3800 (380)
Residual Flux Density	Br	Gauss (mT)	1000 (100)	1200 (120)	1100 (110)	1200 (120)	1200 (120)
Coercive Force	Hc	Oersteds	0.14	0.12	0.08	0.08	0.05
Curie Temperature	Tc	$^\circ\text{C}$	>210	>210	>170	>120	>120
Optimum Frequency range	tmin fmax	MHz	—	— 0.3	— 0.1	— 0.1	—
DC resistivity	ρ	Ω - CM	800	50	30	2	2
Power Loss Typical T=25 $^\circ\text{C}$ F=25KHz,B=200mT T=100 $^\circ\text{C}$ F=100KHz,B=200mT T=25 $^\circ\text{C}$	PL	mW / CM ³	520 460 450	135 130 750	—	—	—
Mass Density	d	g / CM ³	4.8 ~ 4.9	4.8 ~ 4.9	4.8 ~ 4.9	4.8 ~ 4.9	4.8 ~ 4.9
Temperature Coefficient T= +25 $^\circ\text{C}$ to +100 $^\circ\text{C}$	$\alpha \mu \gamma$	$\times 10^{-6}$	4 ~ 6	4 ~ 6	0 ~ 2	-1 ~ 1	-1 ~ 1
Disaccomodatoin factor	DF	$\times 10^{-6}$	—	≤ 4	≤ 3	≤ 2	—
Eddy current and residual loss constant tand / mi at 25 $^\circ\text{C}$ at $B \leq 10$ Gauss (0.1mT) , f=10KHz	$\frac{\tan\delta}{\mu_i}$	$\times 10^{-6}$	1	≤ 1	≤ 1.5	≤ 3	≤ 6