For Power Supply and Signal Transformer / EKT 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

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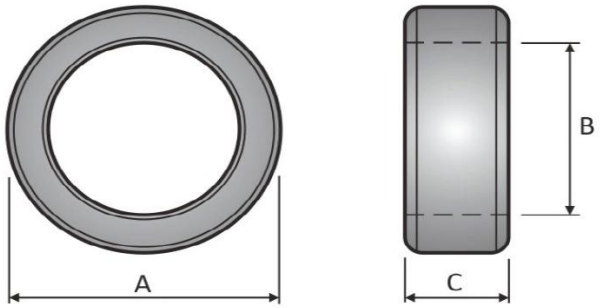
1 2 3 4 5

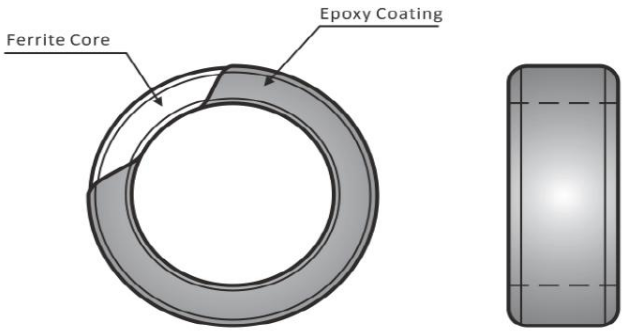
Product Series			Outer Diameter		Inner Diameter		Height	
EKT	Material	2300 μi	060	6 mm	030	3 mm	030	3 mm
			080	8 mm	040	4 mm	040	3 mm
			080	8 mm	050	5 mm	030	3 mm

Coating	
B	Black
C	Gray
G	Green

.Shapes And Dimensions



.Construction



.Material List

No.	Location	Material
1	Ferrite Body	Fe2O3
		MnO
		ZnO
2	Epoxy Coating	Epoxy

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.Dimensions & Characteristics

Unit : mm

Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N^2)	Tolerance
EKT060030030	6.0 ± 0.3	3.0 ± 0.3	3.0 ± 0.2	1000	30%
EKT080040040	8.0 ± 0.3	4.0 ± 0.3	4.0 ± 0.3	1230	30%
EKT080050030	8.0 ± 0.3	5.0 ± 0.3	3.0 ± 0.2	640	30%
EKT090050030	9.0 ± 0.3	5.0 ± 0.3	3.0 ± 0.2	850	30%
EKT100050050	10.0 ± 0.3	5.0 ± 0.3	5.0 ± 0.3	1530	30%
EKT100060028	10.0 ± 0.3	6.0 ± 0.3	2.8 ± 0.2	650	30%
EKT100060035	10.0 ± 0.3	6.0 ± 0.3	3.5 ± 0.2	800	30%
EKT100060040	10.0 ± 0.3	6.0 ± 0.3	4.0 ± 0.2	920	30%
EKT100060050	10.0 ± 0.3	6.0 ± 0.3	5.0 ± 0.3	1200	30%
EKT120060040	12.0 ± 0.4	6.0 ± 0.3	4.0 ± 0.3	1220	30%
EKT127079063	12.7 ± 0.4	7.92 ± 0.3	6.35 ± 0.3	1440	30%
EKT130060070	13.0 ± 0.4	6.0 ± 0.3	7.0 ± 0.3	2400	30%
EKT130070050	13.0 ± 0.4	7.0 ± 0.3	5.0 ± 0.3	1380	30%
EKT140080070	14.0 ± 0.4	8.0 ± 0.3	7.0 ± 0.3	1760	30%
EKT140090050	14.0 ± 0.4	9.0 ± 0.3	5.0 ± 0.3	1060	30%
EKT146105037	14.6 ± 0.4	10.5 ± 0.3	3.7 ± 0.3	550	30%
EKT160080050	16.0 ± 0.4	8.0 ± 0.3	5.0 ± 0.3	1660	30%
EKT160090050	16.0 ± 0.4	9.0 ± 0.3	5.0 ± 0.3	1290	30%
EKT160100070	16.0 ± 0.4	10.0 ± 0.3	7.0 ± 0.3	1480	30%
EKT160120080	16.0 ± 0.4	12.0 ± 0.3	8.0 ± 0.3	1100	30%
EKT180100063	18.0 ± 0.4	10.0 ± 0.3	6.35 ± 0.3	1800	30%
EKT180100100	18.0 ± 0.4	10.0 ± 0.3	10.0 ± 0.3	2800	30%
EKT190110100	19.0 ± 0.4	11.0 ± 0.3	10.0 ± 0.3	2450	30%
EKT190130110	19.0 ± 0.4	13.0 ± 0.3	11.0 ± 0.3	1900	30%
EKT200100070	20.0 ± 0.4	10.0 ± 0.3	7.0 ± 0.3	2150	30%
EKT200100100	20.0 ± 0.4	10.0 ± 0.3	10.0 ± 0.3	3300	30%
EKT200120100	20.0 ± 0.4	12.0 ± 0.4	10.0 ± 0.3	2300	30%
EKT220140080	22.0 ± 0.4	14.0 ± 0.4	8.0 ± 0.3	1700	30%
EKT220140100	22.0 ± 0.4	14.0 ± 0.4	10.0 ± 0.3	2100	30%
EKT220140127	22.0 ± 0.4	14.0 ± 0.4	12.7 ± 0.3	3000	30%
EKT250150100	25.0 ± 0.4	15.0 ± 0.4	10.0 ± 0.3	2200	30%
EKT250150120	25.0 ± 0.4	15.0 ± 0.4	12.0 ± 0.3	2900	30%
EKT250150130	25.0 ± 0.4	15.0 ± 0.4	13.0 ± 0.3	3200	30%

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Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N^2)	Tolerance
EKT260145200	26.0 ± 0.4	14.5 ± 0.4	20.0 ± 0.4	5250	30%
EKT280124076	28.0 ± 0.4	12.4 ± 0.3	7.6 ± 0.3	2400	30%
EKT280160160	28.0 ± 0.4	16.0 ± 0.4	16.0 ± 0.3	4600	30%
EKT280180130	28.0 ± 0.4	18.0 ± 0.4	13.0 ± 0.3	3000	30%
EKT290180150	29.0 ± 0.5	18.0 ± 0.4	15.0 ± 0.3	3200	30%
EKT290190150	29.0 ± 0.5	19.0 ± 0.4	15.0 ± 0.3	2870	30%
EKT310180140	31.0 ± 0.5	18.0 ± 0.5	14.0 ± 0.4	3400	30%
EKT310190130	31.0 ± 0.5	19.0 ± 0.5	13.0 ± 0.4	2800	30%
EKT310190150	31.0 ± 0.5	19.0 ± 0.5	15.0 ± 0.4	3700	30%
EKT310200150	31.0 ± 0.5	20.0 ± 0.4	15.0 ± 0.4	3000	30%
EKT340218210	34.0 ± 0.6	21.8 ± 0.6	21.4 ± 0.4	10100	30%
EKT360230150	36.0 ± 0.5	23.0 ± 0.5	15.0 ± 0.4	7400	30%
EKT370230150	37.0 ± 0.5	23.0 ± 0.5	15.0 ± 0.4	7700	30%
EKT380190130	38.0 ± 0.5	19.0 ± 0.5	13.0 ± 0.4	9500	30%
EKT380190150	38.0 ± 0.5	19.0 ± 0.5	15.0 ± 0.4	11000	30%
EKT380190210	38.0 ± 0.5	19.0 ± 0.5	21.0 ± 0.4	15400	30%
EKT380205150	38.0 ± 0.5	20.5 ± 0.5	15.0 ± 0.4	9900	30%
EKT380220150	38.0 ± 0.5	22.0 ± 0.5	15.0 ± 0.4	8800	30%
EKT380250150	38.0 ± 0.5	25.0 ± 0.5	15.0 ± 0.4	6800	30%
EKT400230200	40.0 ± 0.8	23.0 ± 0.6	20.0 ± 0.5	11800	30%
EKT400250200	40.0 ± 0.8	25.0 ± 0.6	20.0 ± 0.5	10150	30%
EKT420260180	42.0 ± 0.8	26.0 ± 0.6	18.0 ± 0.6	9317	30%
EKT450300150	45.0 ± 0.8	30.0 ± 0.6	15.0 ± 0.4	6600	30%
EKT470270150	47.0 ± 0.8	27.0 ± 0.6	15.0 ± 0.4	8900	30%
EKT480300100	48.0 ± 1.0	30.0 ± 0.5	10.0 ± 0.3	5070	30%
EKT480300150	48.0 ± 1.0	30.0 ± 0.5	15.0 ± 0.4	7800	30%
EKT490310150	49.0 ± 0.6	31.0 ± 0.6	15.0 ± 0.4	7430	30%
EKT490310188	49.0 ± 0.6	31.0 ± 0.6	18.8 ± 0.4	7800	30%
EKT490318188	49.0 ± 0.6	31.8 ± 0.6	18.8 ± 0.4	7800	30%
EKT490338190	49.0 ± 0.6	33.8 ± 0.6	19.0 ± 0.3	7670	30%
EKT500250200	50.0 ± 1.0	25.0 ± 0.6	20.0 ± 0.6	14666	30%
EKT510310130	51.0 ± 1.0	31.0 ± 0.8	13.0 ± 0.4	6900	30%
EKT560320180	56.0 ± 1.0	32.0 ± 1.0	18.0 ± 0.6	10800	30%

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Part No.	A (mm)	B (mm)	C (mm)	AL (nH / N^2)	Tolerance
EKT560360200	56.0 ± 1.0	36.0 ± 1.0	20.0 ± 0.6	9500	30%
EKT580400180	58.0 ± 1.5	40.0 ± 1.0	18.0 ± 0.6	7200	30%
EKT600380200	60.0 ± 1.5	38.0 ± 1.0	20.0 ± 0.6	9870	30%
EKT600400200	60.0 ± 1.5	40.0 ± 1.0	20.0 ± 0.6	8800	30%
EKT630380127	63.0 ± 1.5	38.0 ± 1.0	12.7 ± 0.5	6840	30%
EKT630380250	63.0 ± 1.5	38.0 ± 1.0	25.0 ± 0.8	15500	30%
EKT680440150	68.0 ± 1.5	44.0 ± 0.8	15.0 ± 0.5	7000	30%
EKT740400130	74.0 ± 1.5	40.0 ± 1.0	13.0 ± 0.4	8500	30%
EKT800500200	80.0 ± 1.5	50.0 ± 1.0	20.0 ± 0.8	10100	30%
EKT870540140	87.0 ± 2.0	54.0 ± 2.0	14.0 ± 0.5	7200	30%
EKT870540300	87.0 ± 2.0	54.0 ± 2.0	30.0 ± 1.0	15000	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.

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. Material Characteristic (Power)

Characteristic	Symbol	Unit	EKT	EQT	EFT	EST	ENT
Initial Permeability (B≤10 Gauss(0.1mT) ,T=25℃)	μi		2300 ± 25%	2500 ± 25%	5000 ± 25%	7000 ± 30%	10000 ± 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	℃	>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℃ / F=25KHz,B=200mT T=100℃ / F=100KHz,B=200mT T=25℃	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℃ to +100℃	**α μ γ**	$x10^{-6}$	4 ~ 6	4 ~ 6	0 ~ 2	-1 ~ 1	-1 ~ 1
Disaccomodatoin factor	DF	$x10^{-6}$	–	≤ 4	≤ 3	≤ 2	–
Eddy current and residual loss constant tand / mi at 25°C at B≤10 Gauss (0.1mT) , f=10KHz	$\frac{\tan\delta}{\mu i}$	$x10^{-6}$	1	≤ 1	≤ 1.5	≤ 3	≤ 6