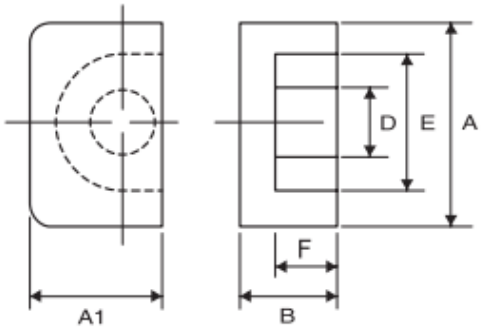
Type : EP Cores

Ordering Code:

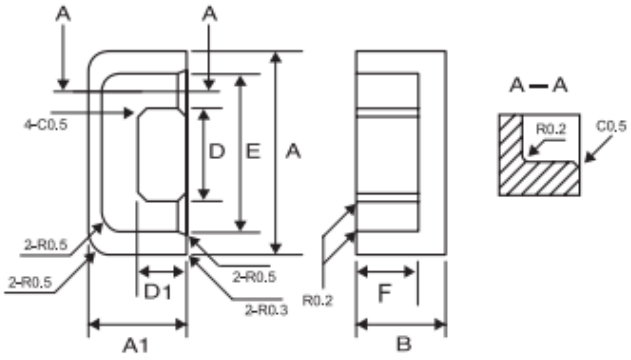
P4	EP7	G□
Material 材質	Core Size 品名	Gapped AL Value

Shape:

Type:1



Type:2



■ DIMENSIONS

CORES	DIMENSIONS (mm)						
	A	A1	B	D	E	F	Type
EP5	6.00 ± 0.15	3.80 ± 0.10	2.80 ± 0.05	1.70 ± 0.10	4.40 ± 0.15	2.00 ± 0.10	1
EP5-1	6.00 ± 0.15	3.80 ± 0.10	3.40 ± 0.05	1.70 ± 0.10	4.40 ± 0.15	2.60 ± 0.10	1
EP7	9.20 ± 0.20	6.35 ± 0.15	$3.75^{+0.00}_{-0.10}$	3.30 ± 0.10	7.40 ± 0.20	2.60 ± 0.10	1
EP7-1	9.20 ± 0.20	6.35 ± 0.15	4.75 ± 0.05	3.30 ± 0.10	7.40 ± 0.20	3.60 ± 0.10	1
EP7C	9.40 ± 0.20	6.50 ± 0.15	3.70 ± 0.10	3.30 ± 0.10	7.40min	2.60 ± 0.10	1
EP10	11.50 ± 0.30	7.65 ± 0.20	$5.20^{+0.00}_{-0.10}$	3.30 ± 0.15	9.40 ± 0.20	3.70 ± 0.10	1
EP10B	11.50 ± 0.30	7.65 ± 0.20	5.20 ± 0.10	3.30 ± 0.15	9.40 ± 0.20	3.70 ± 0.10	1
EP13	12.50 ± 0.30	8.80 ± 0.20	$6.50^{+0.00}_{-0.15}$	4.35 ± 0.15	10.10 ± 0.20	4.60 ± 0.10	1
EP13.3	13.30 ± 0.20	5.50 ± 0.15	6.50 ± 0.10	5.60 ± 0.10	10.80 ± 0.20	4.55 ± 0.10	2
EP15.2	15.20 ± 0.30	11.00 ± 0.20	7.10 ± 0.15	5.40 ± 0.20	11.00min	4.60 ± 0.15	1
EP17	18.00 ± 0.40	11.00 ± 0.20	8.40 ± 0.20	5.68 ± 0.18	12.00 ± 0.40	5.65 ± 0.15	1

■ EFFECTIVE PARAMETERS

CORES	EFFECTIVE PARAMETERS				
	$C_1(mm^{-1})$	Le(mm)	$Ae(mm^2)$	$Ve(mm^3)$	Wt(g/set)
EP5	3.20	9.70	3.00	28.70	0.46
EP5-1	3.60	10.80	3.00	32.40	0.46
EP7	1.52	15.70	10.30	162.00	1.42
EP7-1	1.68	17.96	10.66	191.45	1.42
EP7C	1.44	15.37	10.67	164.00	1.44
EP10	1.70	19.20	11.30	217.00	2.92
EP10B	1.70	19.20	11.30	216.96	2.76
EP13	1.24	24.20	19.50	472.00	4.86
EP13.3	1.40	24.42	17.35	423.68	3.14
EP15.2	0.81	24.82	30.76	763.41	4.50
EP17	0.84	28.70	34.00	970.00	11.60

■ ELECTRICAL CHARACTERISTICS

CORES	AL + 30% - 20% (nH/N^2)					AL + 40% - 30% (nH/N^2)				
	P4	P5	N42	A05	A05(L)	A101	A101(L)	A121	A121(L)	A151(L)
EP5	400 ± 25%	380 ± 25%	500 ± 25%			600	1900	650	2050	1852min
EP5-1	380 ± 25%		450 ± 25%				1850			
EP7	1100	1000	1350 ± 25%	2000	3500	2050	5200	2100	3900min	4800min
EP7-1						1980				
EP7C	1100									
EP10	1000	950	1270 ± 25%	2000	3400	2050 ± 30%	4800	2150	3950min	4800min
EP10B	1000									
EP13	1600	1430		2800	4400	3300	7000	3500	5800min	7000min
EP13.3										6446min
EP15.2						5160 (ref)				
EP17	2500		3060 ± 25%	3970 ± 25%			11000		12600	

Material Characteristics (7)

	Symbol	Unit	Measuring Conditions			High Permeability Materials			
			Freq.	Flux den.	Temp.	A10	A102	A121	A151
Initial Permeability	μ_i		≤10kHz	0.25mT	25°C	10000 ± 30%	10000 ± 30%	12000 ± 30%	15000 ± 30%
Relative Loss Factor	$\tan\delta/\mu_i$	10^{-6}	10kHz	< 0.25mT	25°C	< 10	< 10	< 10	< 10
			100kHz		25°C	< 60	< 60	< 60	< 110
Saturation Flux Density	Bms	mT	10kHz	H = 1200A/m	25°C	410	380	380	400
					100°C	210	180	180	170
Remanence	Brms	mT	10kHz	H = 1200A/m	25°C	140	95	130	220
					100°C	110	75	110	100
Temperature Factor of Permeability	αF	10^{-6}/°C	10kHz	< 0.25 mT	0 ~ 20°C	0 ~ 1.5	-1 ~ 1	0 ~ 1.5	-1 ~ 1
					20 ~ 70°C	-0.5 ~ 1	-1 ~ 1	-0.5 ~ 1	-1 ~ 1
Hysteresis Material Constant	ηB	10^{-6}/mT	10kHz	1.5-3.0mT	25°C	< 0.5	< 1	< 0.5	< 0.5
Disaccommodation Factor	D_F	10^{-6}	10kHz	< 0.25 mT	25°C	< 2	< 2	< 2	< 2
Curie Temperature	Tc	°C				130	120	110	110
Resistivity	ρ	Ωm				0.15	0.15	0.12	0.10
Density	d	g/cm³				4.90	4.90	4.90	5.00