

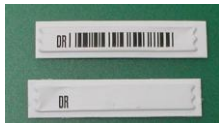
Various Global Product Applications of Amorphous Material



Distribution transformers



Brazing



Electric article surveillance Tags

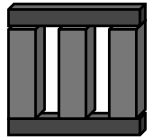


Medical equipment

Ribbon



Powerlite Forms



Cut cores



Harmonic filters



Metglas®

FINEMET®

Current transformer



Smart meter



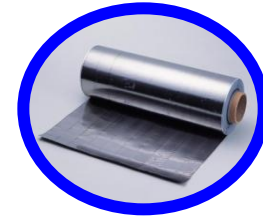
CMC coils



Air conditioner



FM Shielding sheets



Digital cameras

Pulse power core



CMC cores



particle accelerator

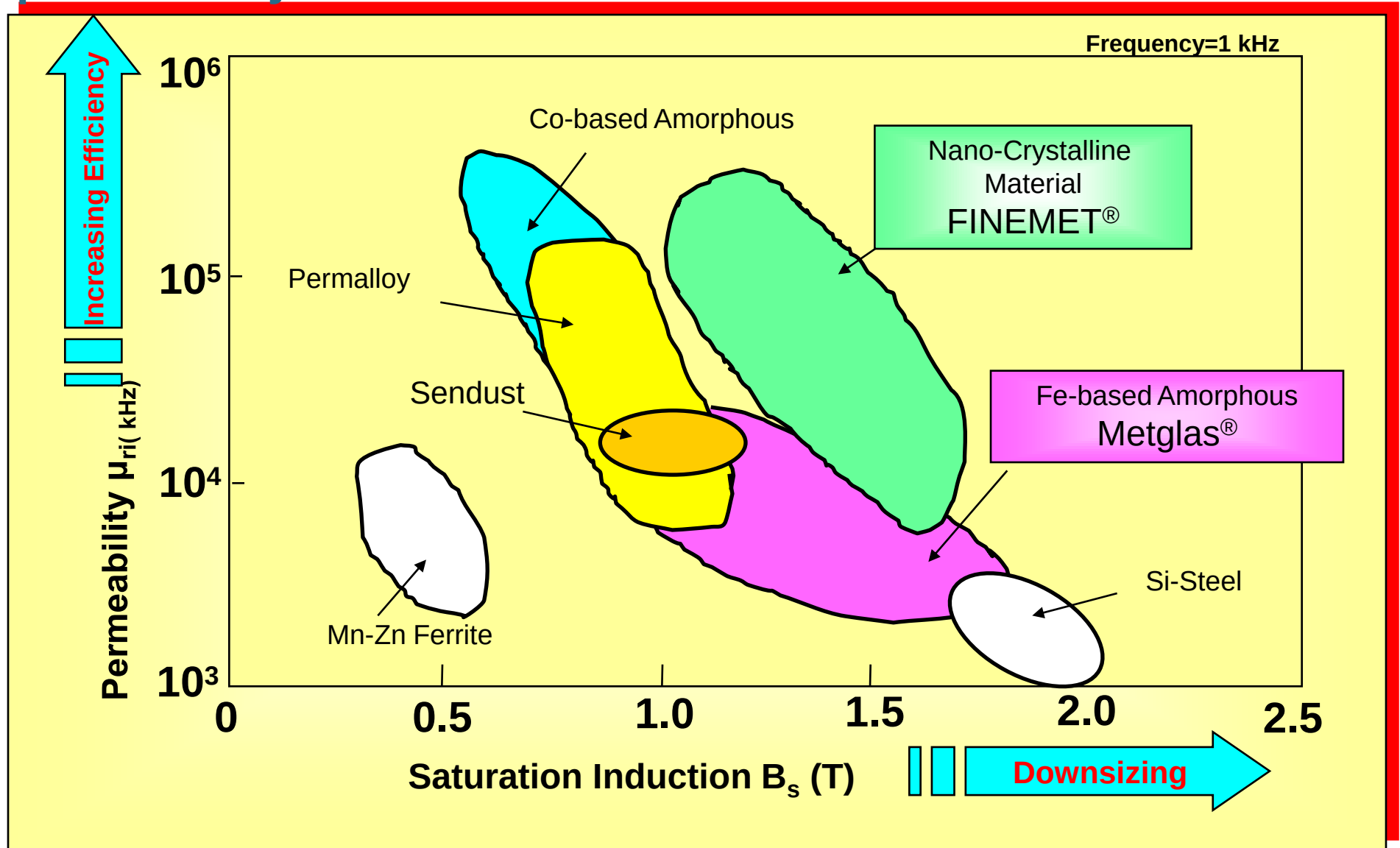


Train



Elevator

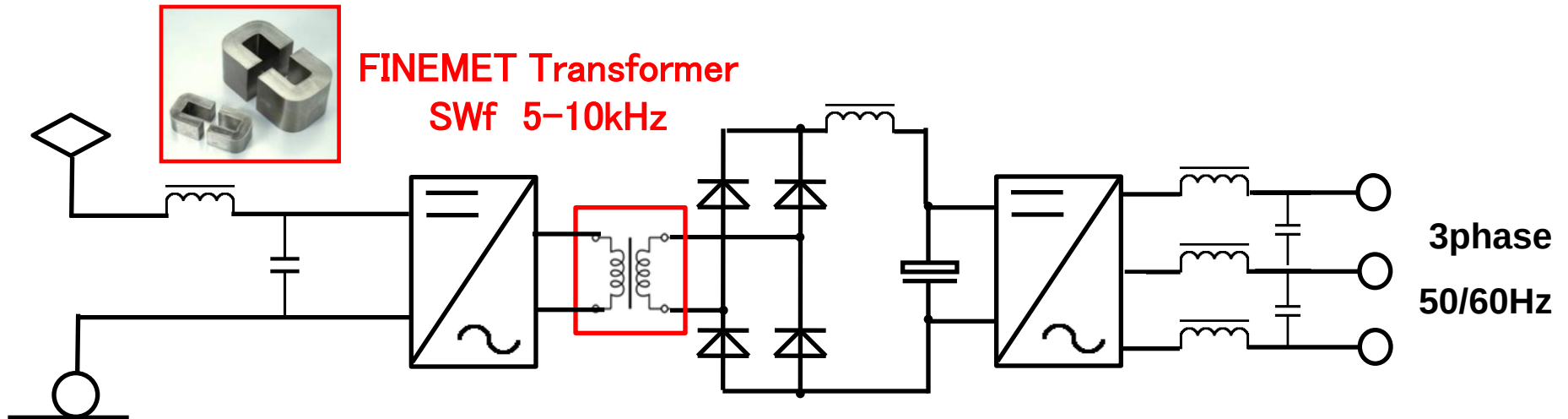
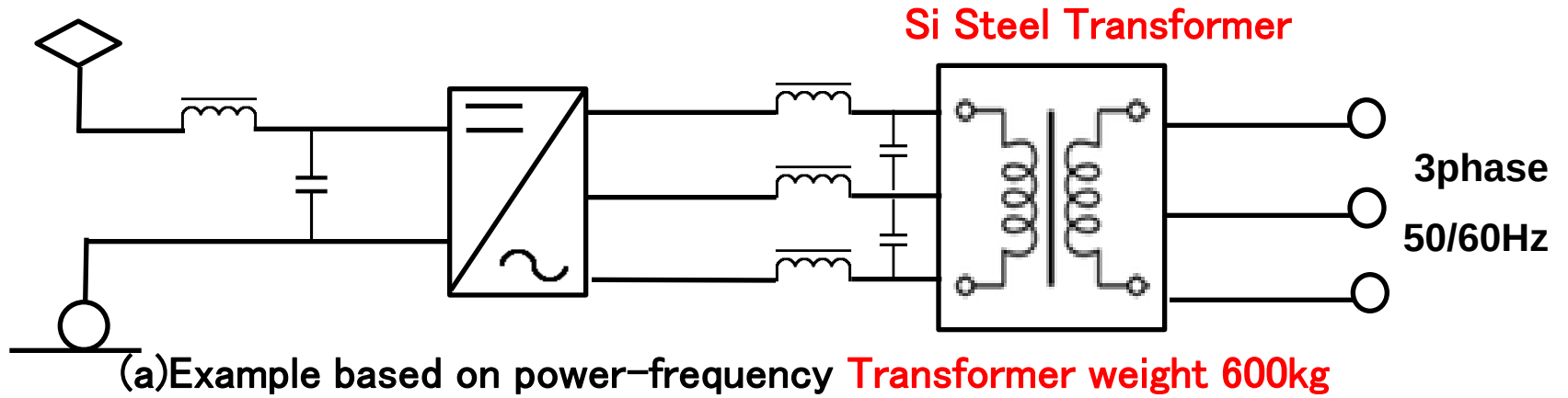
Relationship between Saturation induction and permeability



FINEMET CORES for TRANSFORMER



Example of reducing core size and weight of transformer



FINEMET troidal cores –FT-3L Series

for High Transformer Application

Features

- Based On a Nano crystalline Technologies
- One of the lowest loss material(up to 20kHz)
- Offer high Saturation flux density of 1.23T
- Low Magnetstriction (FT-3: $\lambda_s < 1 \times 10^{-6}$)
- Small Temperature Dependence ($T_c = 570^\circ\text{C}$)



Applications

- Transformer for
 - Auxiliary Power Supplies
 - Traction Converter Power Supplies
 - EV HEV charger system
 - Solar inverter system
 - General Industrial power supplies
 - Welding systems

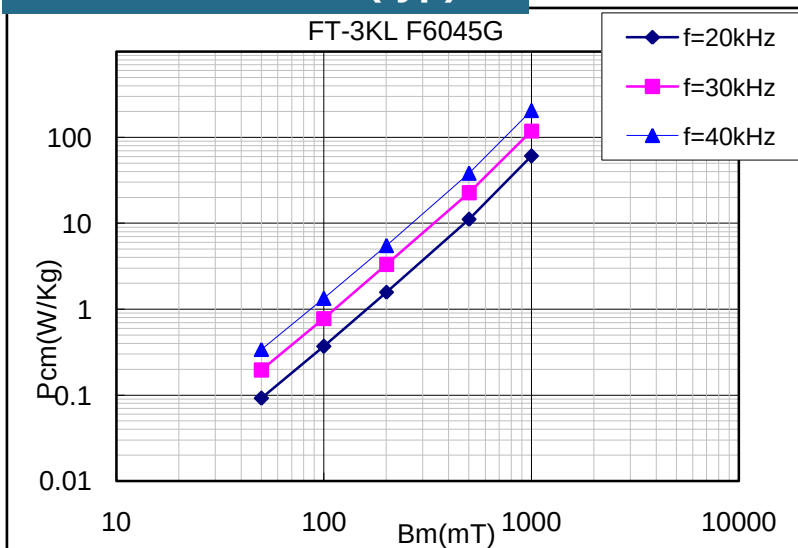


Various Size of Troid cores

Specs

Items	Value
Saturation Flux Density Bs (T)	1.25
Br (T) (20KHz)	<0.20
Core Losses (20KHz/0.2T) (W/Kg)	<3.4
Core Losses (20KHz/0.5T) (W/Kg)	<30
Permeability (20KHz)	>20,000
Hc (A/m)	<1.60
Magnet striction ($\times 10^{-6}$)	<2

Core loss vs Bm (typ)



Core Line up

Product name	Weight (kg)	Dimension(mm)			Cross section Ae(mm ²)	Mean path Lm(mm)
		OD	H	ID		
FT-3KL F2515D	0.03	28.0	16.8	12.8	46.9	62.8
FT-3KL F3320E	0.05	35.8	17.5	17.3	73.1	83.3
FT-3KL F3724E	0.06	40.0	17.6	21.1	73.1	95.8
FT-3KL F4424G	0.12	46.5	22.8	21.5	142.5	106.8
FT-3KL F4535G	0.09	49.0	25.0	31.0	75.0	125.7
FT-3KL F4627H	0.17	50.0	28.2	23.4	178.1	114.7
FT-3KL F6045G	0.16	64.0	25.0	41.0	112.5	164.9
FT-3KL F6045P	0.21	64.0	35.0	41.0	167.0	164.9
FT-3KL F7555G	0.27	79.0	25.0	51.0	150.0	204.2
FT-3KL F7555P	0.35	79.0	35.0	51.0	228.0	204.2
FT-3KL F7555Z	0.66	79.0	58.0	51.0	397.5	204.2
FT-3KL F10080G	0.34	104.0	25.0	76.0	138.8	285.1
FT-3KL F10276Z	0.90	107.0	58.0	71.0	551.2	279.6
FT-3KL F140100	1.34	144.0	35.0	96.0	427.5	380.1
FT-3KL F140100Z	2.30	144.0	58.0	96.0	761.2	380.1
FT-3KL F200160	1.88	204.0	35.0	156.0	427.5	568.6
FT-3KL F11080GB	0.61	181.0	26.0	131.0	213.8	300.8

FINEMET Cut Cores – F3CC Series

for High Transformer Application

Features

- Based On a Nano crystalline Technologies
- One of the lowest loss material (up to 20kHz)
- Easy to Install
- Offer high Saturation flux density of 1.23T
- Low Magnetstriction (FT-3: $\lambda_s < 1 \times 10^{-6}$)
- Small Temperature Dependence ($T_c = 570^\circ\text{C}$)

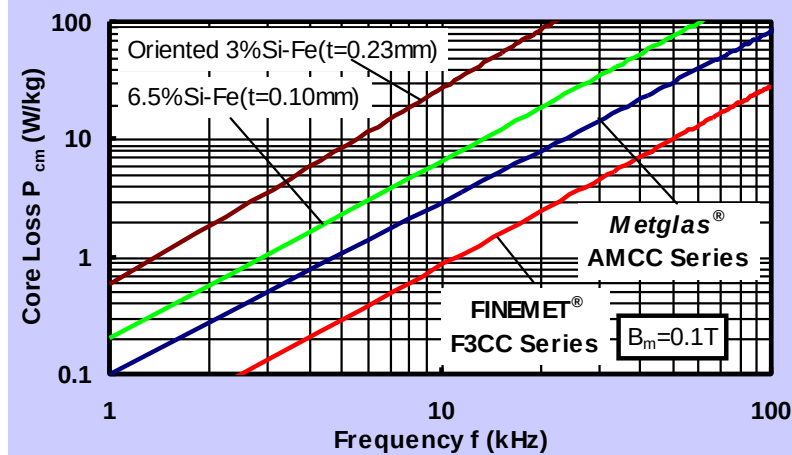
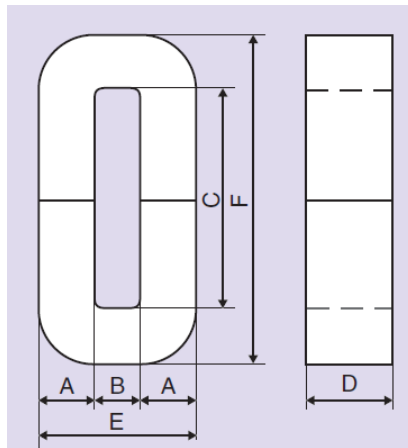


Applications

- Transformer for
 - Auxiliary Power Supplies
 - Traction Converter Power Supplies
 - EV HEV charger system
 - Solar inverter system
 - General Industrial power supplies



Various Size of F3CC Cur Cores



品名コード Product Code	品名 Part Name	A (mm) TYP.	B (mm) TYP.	C (mm) TYP.	D (mm) TYP.	E (mm) TYP.	F (mm) TYP.	L _m (mm) TYP.	A _e (mm ²) TYP.	Mass (g) TYP.
F1AH0792	F3CC06.3	10	11	33	20	31	53	128	156	149
F1AH0793	F3CC0008	11	13	30	20	35	52	130	172	166
F1AH0794	F3CC0010	11	13	40	20	35	62	150	172	192
F1AH0795	F3CC016A	11	13	40	25	35	62	150	215	240
F1AH0796	F3CC016B	11	13	50	25	35	72	170	215	272
F1AH0797	F3CC0020	11	13	50	30	35	72	170	257	326
F1AH0798	F3CC0025	13	15	56	25	41	82	194	254	366
F1AH0799	F3CC0032	13	15	56	30	41	82	194	304	439
F1AH0800	F3CC0040	13	15	56	35	41	82	194	355	513
F1AH0801	F3CC0050	16	20	70	25	52	102	244	312	567
F1AH0802	F3CC0063	16	20	70	30	52	102	244	374	680
F1AH0803	F3CC0125	19	25	83	35	63	121	292	519	1128