Big Current Transformer Core

Features

High permeability and wide linear working range
Lighter weight than Permalloy and Silicon steel cores
Cheaper cost comparing with Permalloy core.
Good temperature stability and anti-impulsion by accident big current

Application

High accuracy class current transformer (Single to Three phases): 0.1~0.5
Electric power current transformer: Rated Voltage: 10kV ~ 500kV

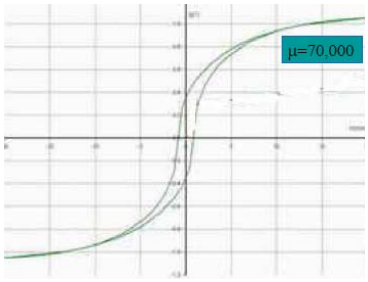
Property

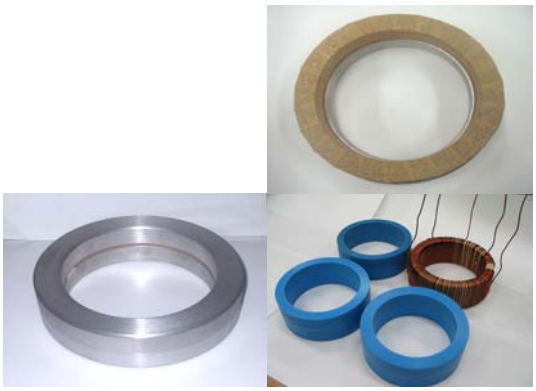
Properties	Nano-Crystalline	Mumetal	Mumetal Plus	Fe-based Amorphous	Silicon steel
Initial Perm. (50Hz)	6~12 × 10^4	6 × 10^4	8 × 10^4	10000	~10^3
MAX. Permeability	60 × 10^4	24× 10^4	28× 10^4	25 × 10^4	4 × 10^4
Saturation Induction (T)	1.25	0.77	0.77	1.56	2.03
Curie Temp. (°C)	570	350	350	410	740
Density (kg/m3)	7250	8800	8800	7250	7650
Resistivity (μΩ-m)	0.90	0.60	0.60	1.30	0.50
Stacking factor	0.7~0.8	0.9	0.9	0.82	0.95
Strip thickness (mm)	0.03	0.1~0.3	0.1~0.3	0.03	0.3

Specification

Product Code meaning: ANB-BCT22219030-AR

ANB: AmonA product BCT: big current transformer core, core size OD222-ID190-HT30mm , A: nanocrystalline alloy R: round type BH loop

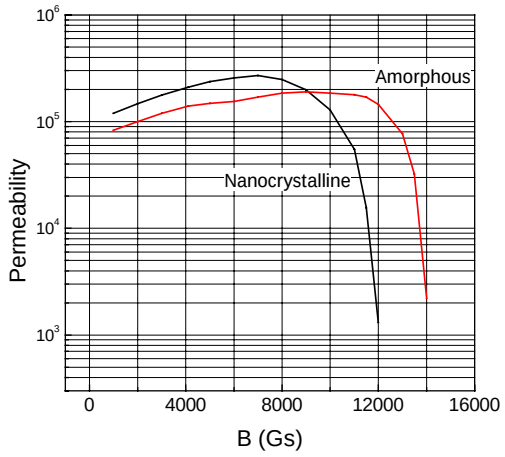


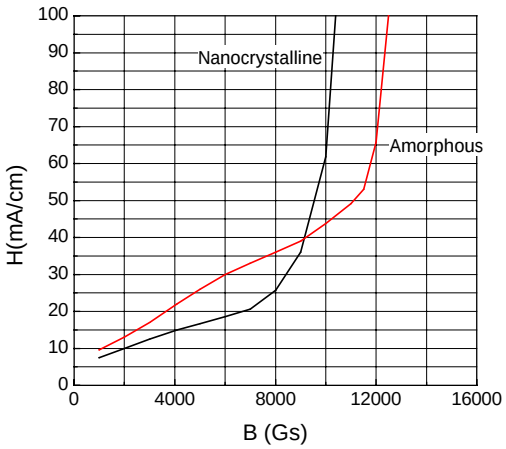


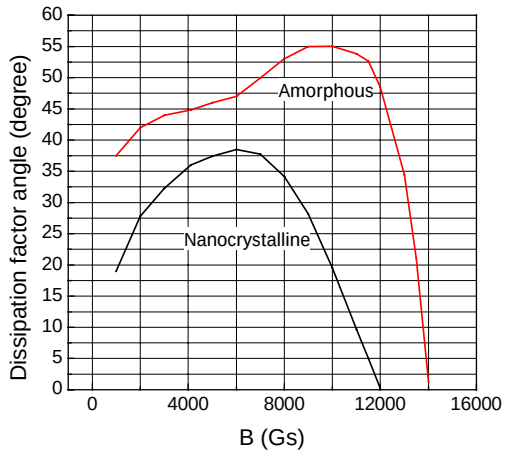
Product Code No.	Finished size			Core size			lc	Ac	Core weight	μi=70000
	OD	ID	HT	OD	ID	HT				
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(cm)	(cm^2)	(grams)	AL(uH/N^2)
504010-AR	54.4	37.1	13.7	50	40	10	14.13	0.38	39	23.33
504020-AR	54.5	36	24.7	50	40	20	14.13	0.75	77	46.67
504025-AR	54.5	35.3	29.7	50	40	25	14.13	0.94	97	58.33
605010-AR	65	45	13.5	60	50	10	17.27	0.38	47	19.09
605025-AR	65	45	29.5	60	50	25	17.27	0.94	118	47.73
605030-AR	65	45	34.5	60	50	30	17.27	1.13	142	57.27
615510-AR	66	53	13.4	61	55	10	18.21	0.23	30	10.86
625410-AR	67	51.4	13.4	62	54	10	18.21	0.30	40	14.48
655020-AR	70	46	25	65	50	20	18.06	1.13	148	54.78
655025-AR	68.2	46.7	28.6	65	50	25	18.06	1.41	185	68.48
655510-AR	68.2	51.5	13.5	65	55	10	18.84	0.38	52	17.50
706110-AR	73	58	13.5	70	61	10	20.57	0.34	51	14.43
706120-AR	73	57	24.5	70	61	20	20.57	0.68	101	28.85
706025-AR	73	56	29.5	70	60	25	20.41	0.94	140	40.38
807020-AR	83.5	66	24.5	80	70	20	23.55	0.75	129	28.00
907210-AR	94	68	13	90	72	10	25.43	0.68	125	23.33
907218-AR	94	68	21	90	72	18	25.43	1.22	226	42.00
957525-AR	99	71	24.5	95	75	25	26.69	1.88	365	61.76
1008510-AR	104	82	13	100	85	10	29.05	0.56	119	17.03
1008020-AR	104	76.4	23.4	100	80	20	28.26	1.50	309	46.67
11010015-AR	115	95	18.5	110	100	15	32.97	0.56	135	15.00
1129815-AR	117	94	18.5	112	98	15	32.97	0.79	190	21.00
12010025AR	125	96	29	120	100	25	34.54	1.88	473	47.73
1259025-AR	130	85	29	125	90	25	33.76	3.28	809	85.47
1309025-AR	136	85	28	130	90	25	34.54	3.75	946	95.45

1309030-AR	136	85	36	130	90	30	34.54	4.50	1135	114.55
14010020-AR	144	96	24.5	140	100	20	37.68	3.00	825	70.00
14010025-AR	144	96	29	140	100	25	37.68	3.75	1031	87.50
14010040-AR	144	96	46	140	100	40	37.68	6.00	1650	140.00
24819820-AR	252	188	25	248	198	20	70.02	3.75	1917	47.09
24819830-AR	252	188	35	248	198	30	70.02	5.63	2875	70.63
26421430-AR	268	210	35	264	214	30	75.05	5.63	3082	65.90
27020030-AR	274	196	35	270	200	30	73.79	7.88	4242	93.83
18014030-AR	184	136	35	180	140	30	50.24	4.50	1650	78.75
22219025-AR	226	185	30.9	222	190	25	64.68	3.00	1417	40.78
22219030-AR	226	185	35.9	222	190	30	64.68	3.60	1700	48.93
28325925-AR	286	256	28	283	259	25	85.09	2.25	1398	23.25
33631125-AR	339	308	28	336	311	25	101.58	2.34	1738	20.29
39637325-AR	400	369	28	396	373	25	120.73	2.16	1900	15.70

Material Characteristic Comparison







Material Characteristic Comparison