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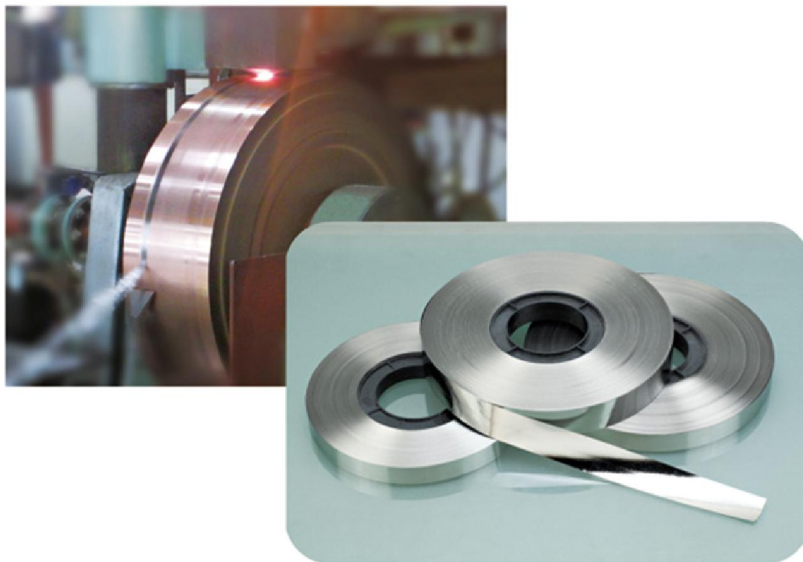
铁基非晶带材 Iron-based Amorphous Ribbon

非晶是一种新型软磁合金材料，它采用国际先进的超级冷技术将熔融金属以每秒百万度的速度直接冷却，形成厚度为25~35 μm 的非晶体薄带，得到原子排列组合上具有短程有序、长程无序特点的非晶合金组织，在微观结构上完全不同于传统的金属和合金材料。因此，在物理性能、化学性能、机械性能等诸多方面具有传统金属材料无可比拟的优异特性。另外，在制备工艺方面也完全不同于传统的冶金工艺，由钢液一步制成非晶薄带，省去了传统冶金工艺中的铸、锻、中间退火、轧制等多少工序，节省了大量能源，且无污染物排放。非晶合金被誉为环保、节能、高效的新型绿色材料。

铁基非晶带材具有超微细晶粒结构，以其高的磁导率、高饱和磁感、低铁损和优良稳定性，满足了当今电子产品向高频化、大电流、小型化、节能化方向发展的需要，可以替代硅钢、坡莫合金和铁氧体，广泛应用于电力、电子产品中。

Amorphous alloy is a new soft magnetic material. It is produced through the advanced technology of rapid solidification of molten metal at a cooling rate of about a million $^{\circ}\text{C}/\text{sec}$. During this process the metal is rapidly quenched as a form of ribbon with 25~35 μm thickness, and the micro-structure of the alloy is the amorphous due to the high quenching rate.

Iron-based amorphous ribbon has many advantages, such as high permeability, high saturate induction, high electrical resistivity, high density, low core loss and good stability. It can replace the materials of silicon steel, permalloy and ferrite. It is widely used in electronics products that high accuracy and good stability are the most required.



应用领域 Application

- 逆变器用电抗器、变压器磁芯 Inverter reactor, transformer core.
- 宽恒导磁电感磁芯、PFC电感磁芯 Wide constant permeable inductor core, PFC inductor core.
- 中频变压器磁芯、配电变压器磁芯 Mid-frequency transformer core, distribution transformer core.
- 数码电子用非晶电磁屏蔽箔片 Amorphous electromagnetic shielding material for digital devices.

性能指标 Performance Index

项目 Item	指标 Performance	项目 Item	指标 Performance
饱和磁感应强度 Bs (T) Saturate induction	1.56	饱和磁致伸缩系数 λ_s Magnetostriction	27×10^{-6}
居里温度 Tc (°C) Curie temerature	400	密度 ρ (g/cm ³) Density	7.18
晶化温度 Tx (°C) Crystallization	515	电阻率 δ ($\mu\Omega\cdot\text{cm}$) Resistivity	130
硬度 Hv Hardness	960	矫顽力 Hc (A/m) Coercivity	< 4

产品规格 Specification

产品编码说明: J 1K101 250 28 2
 Code introduction: 剪切(P-喷制带) 非晶材质 带宽(含一位小数) 厚度 厚度偏差
 Slitting strip(P-spraying strip) Amorphous Width(incl. a decimal) Thickness Thickness deviation

产品牌号 Part No.	带材宽度 Width (mm)	带材厚度 Thickness (μm)
J1K101030282	3	28
J1K101035282	3.5	28
J1K101045282	4.5	28
J1K101050282	5	28
J1K101060282	6	28
J1K101065282	6.5	28
J1K101080282	8	28
J1K101100282	10	28
J1K101150282	15	28
J1K101200282	20	28
J1K101250282	25	28
J1K101300282	30	28
J1K101350282	35	28
J1K101400282	40	28
J1K101450282	45	28
J1K101500282	50	28
J1K101550282	55	28
J1K101600282	60	28
J1K101650282	65	28
J1K101700282	70	28
J1K1017800282	80	28

注 Note:

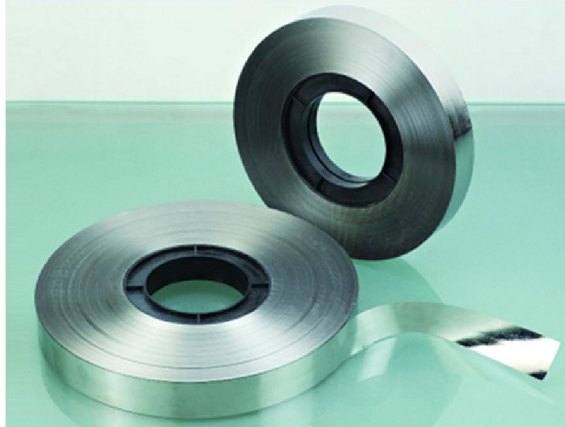
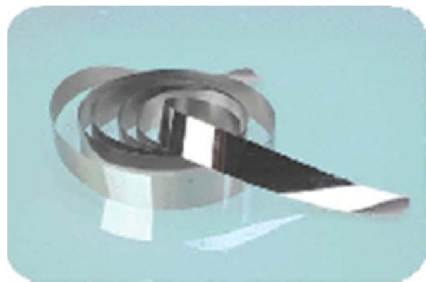
- 1、带材厚度 $\pm 2\mu\text{m}$; Ribbon width $\pm 2\mu\text{m}$;
- 2、可以根据客户需求, 提供其他规格的带材。Welcome other specification concerning customer's demand.

铁基纳米晶带材 Iron-based Nano-crystalline Slim Ribbon

铁基纳米晶合金由铁、硅、硼、铌、铜等组成。含有Cu和Nb的铁基非晶合金在晶化温度上退火时，会形成非常细小的晶粒组织，晶粒尺寸仅有10~20纳米，这种非晶合金经过特殊的晶化退火而形成的晶态材料成为纳米晶合金。

纳米晶材料具有高饱和磁感应强度、高导磁率、低矫顽力、低损耗及良好的稳定性、高强韧性及耐磨耐蚀等优异特性。作为在金属软磁材料中具有最佳的性能价格比的纳米晶合金材料，可以替代硅钢、坡莫合金和铁氧体，成为中高频变压器、互感器、电感元器件的理想材料。

Iron-based nanocrystalline alloy strip has the properties of high saturation magnetization and permeability, low coercive force and core loss, good stabilities on temperature and time effect, excellent abilities of anti-wearing and anti-rusty, and it shows the best property-value ratio among all of the soft magnetic materials.



应用领域 Application

- EMC共模、差模滤波电感磁芯 EMC common mode, normal mode filter chokes.
- 开关电源大中小功率变压器磁芯 Cores for main transformer of switch power supply and control transformer.
- 不同精度电流互感器（零序、漏保）磁芯 Different accuracy CT/VT cores.
- 磁放大器、尖峰抑制器、饱和电感磁芯 Mag-amp and pulse killer cores.

典型1K107纳米晶带材性能 Performance of 1K107 Nano-crystalline strip

项目 Item	指标 Performance	项目 Item	指标 Performance
饱和磁感应强度 B_s (T) Saturate induction	1.25	饱和磁致伸缩系数 λ_s Magnetostriction	2.0×10^{-6}
居里温度 T_c (°C) Curie temerature	570	密度 ρ (g/cm ³) Density	7.2
晶化温度 T_x (°C) Crystallization	500	电阻率 δ ($\mu\Omega \cdot \text{cm}$) Resistivity	130
硬度 Hv Hardness	880	厚度 μm Thickness	20~35

1K107纳米晶带材规格 1K107 Nano-crystalline strip specification

带材宽度/Strip width: 3~50mm

产品编码说明:

P	1K107	100	32	2
Code introduction:	纳米晶材质	带宽	厚度	厚度偏差
	Nano-crystalline	Width	Thickness	Thickness deviation

1K107B纳米晶带材性能 Performance of 1K107B Nano-crystalline Ribbon

项 目 Item	指 标 Performance
带材厚度 Thickness (mm)	0.018-0.025
填充系数 Stack factor σ	>0.8
磁感应强度 Magnetic induction $B_{800}(T)$	$\Rightarrow 1.2$
矫顽力 Coercivity H_c (A/m)	≤ 1.6
铁损 Core loss $P_{0.5T/20k}$ (W/kg)	≤ 25
铁损 Core loss $P_{0.3T/100k}$ (W/kg)	≤ 100
磁导率 Permeability μ (1kHz)	$\Rightarrow 70000$
磁导率 Permeability μ (10kHz)	$\Rightarrow 60000$
磁导率 Permeability μ (100kHz)	$\Rightarrow 10000$
居里温度 Curie temperature T_c (°C)	570
连续工作温度 Operating temperature (°C)	-50 ~ +120
饱和磁致伸缩系数 Magnetostriction λ_s	$< 2 \times 10^{-6}$

1K107B纳米晶带材规格 Specification of 1K107B Nano-crystalline Ribbon

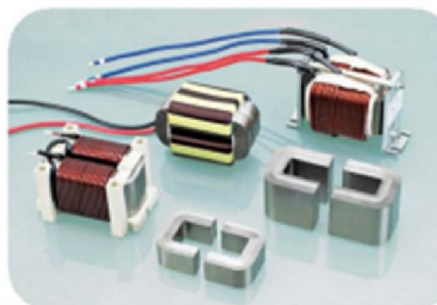
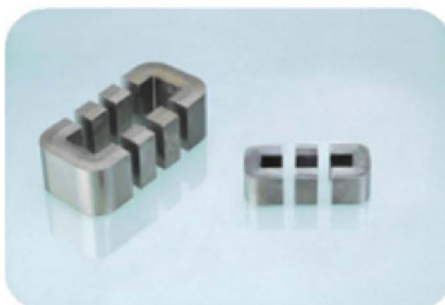
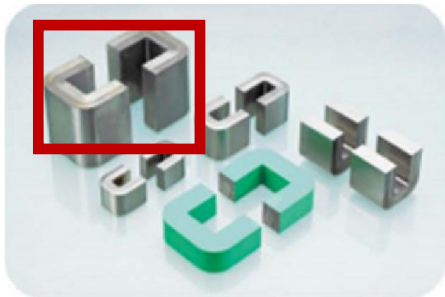
产品编码说明:	J	1K107B	30	23	2
Code introduction:	剪切带 Slitting strip	纳米晶B带 Nano-crystalline B Ribbon	带宽 Width	厚度 Thickness	厚度偏差 Thickness deviation

产品牌号 Part No.	带材宽度 Width (mm)	带材厚度 Thickness (μm)
J1K107B030232	3	23
J1K107B032232	3.2	23
J1K107B035232	3.5	23
J1K107B045232	4.5	23
J1K107B050232	5	23
J1K107B060232	6	23
J1K107B065232	6.5	23
J1K107B080232	8	23
J1K107B100232	10	23
J1K107B150232	15	23
J1K107B200232	20	23
J1K107B250232	25	23
J1K107B300232	30	23

注 Note:

- 带材厚度 $\pm 2\mu m$ ，最宽为30mm；Ribbon thickness $\pm 2\mu m$, Max width 30mm.
- 可以根据客户需求，提供其他规格的带材。Welcome other specification concerning customer's demand.

铁基非晶C型铁芯 Iron-based Amorphous C-Cores



应用领域 Application

- 光伏逆变器用非晶电抗器铁芯 Reactor cores for PV inverter
- 高频大功率开关电源用输出滤波电抗器 Filter reactor of high frequency super switching power supply
- 中高频开关电源变压器 Mid-high frequency switching power supply
- 某些不间断电源中的主变压器 Major transformer of UPS power supply

性能特点 Characteristics

- 高饱和磁感应强度 - 减小磁芯体积 High saturate induction - Reducing core volume
- 矩形结构 - 便于线圈装配 Rectangular strcture - Easy for coil assembling
- 磁芯开口 - 优良的抗直流偏置饱和能力 Core cutting - Good for anti-DC-bias-saturation
- 低损耗 - 减小温升(硅钢的10~20%) Low core loss - Anti-temperature rising (10~20% compared to silicon steel)
- 良好的稳定性 - 可在-50~130°C长时间工作 Good stability - Stable working rom -50~130°C

C型铁芯产品规格表 Amorphous C-Cores Specification sheet

	a - 叠厚; b - 窗宽; c - 窗高; d - 高度; e - 宽度; f - 长度; Lm - 磁路长度; Ac - 有效截面积; Wa - 窗口面积; Ac - 铁芯面积积; Mass - 质量 a - core build; b - window width; c - window height; d - strip width; e - core width; f - core length; Lm - Length of magnetic path; Ac - section area; Mass - weight
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铁芯型号 Code	a (mm) ±		b ^{ref} (mm)	c ^{ref} (mm)	d (mm) ±		e (mm) ±		f (mm) ±		Lm (cm)	Ac (cm ²)	Wa (cm ²)	WaAc (cm ⁴)	Mass (g)
CACC-4	9	0.5	10	32.8	15	0.5	28	1.5	50.8	1.5	11.2	1.20	3.3	3.9	97
CACC-4B	9	0.5	11	33	15	0.5	29	1.5	51	1.5	11.5	1.20	3.6	4.4	99
CACC-6.3	10	0.5	11	33	20	0.5	31	1	53	2	11.8	1.78	3.6	6.5	150
CACC-8	11	0.8	13	30	20	0.5	35	1	52	2	11.9	1.96	3.9	7.6	167
CACC-9	11	0.8	13	37	20	0.5	35	1	59	2	13.1	1.96	4.8	9.4	184
CACC-10	11	0.8	13	40	20	0.5	35	1	62	2	13.7	1.96	5.2	10.2	193
CACC-11	11	0.8	14.5	38	20	0.5	36.5	1	60	2	13.6	1.96	5.5	10.8	191
CACC-12	8	0.5	14	31	40	1	30	1	47	1.5	11.2	2.85	4.3	12.4	228
CACC-16A	11	0.8	13	40	25	0.5	35	1	62	2	13.7	1.45	5.2	12.7	241
CACC-16B	11	0.8	13	50	25	0.5	35	1	72	2	15.7	2.45	6.5	15.9	276
CACC-20	11	0.8	13	50	30	0.5	35	1	72	2	15.7	2.94	6.5	19.1	331
CACC-20B	11	0.8	13.6	50	30	0.5	35.6	1	72	2	15.8	2.94	6.8	20.0	334
CACC-20C	11	0.8	13.3	50	30	0.5	35.3	1	72	2	15.8	2.94	6.7	20.0	333
CACC-20D	11.7	0.8	14	50	30	0.5	37.4	1	73.4	2	16.1	3.17	7.0	22.2	368
CACC-20E	11	0.8	14	50	30	0.5	36	1	72	2	15.8	2.94	7.0	20.2	336
CACC-21	11	0.8	17	32	40	1	39	1	54	2	12.9	3.92	5.4	21.3	363
CACC-25	13	0.8	15	56	25	0.5	41	1	82	2	17.9	2.89	8.4	24.3	372
CACC-26	16	1	40	45	20	0.5	72	1	77	2	21.7	2.85	18.0	51.3	443
CACC-26B	16	1	20	50	20	0.5	52	1	82	2	18.7	2.85	10.0	28.5	382
CACC-30	8	0.5	20	54	40	1	36	1	70	2	17.0	2.85	10.8	30.8	347
CACC-31	10	0.5	15.4	53.6	30	0.5	25.4	1	73.6	2	16.6	2.67	8.3	22.0	318
CACC-32	13	0.8	15	56	30	0.5	41	1	82	2	17.9	3.47	8.4	29.2	447
CACC-32B	13	0.8	15.2	56	30	0.5	41.2	1	82	2	18.0	3.47	8.5	29.5	448
CACC-32C	13	0.8	15.6	56	30	0.5	41.6	1	82	2	18.1	3.47	8.7	30.3	450
CACC-32D	13	0.8	15.3	57	30	0.5	41.3	1	83	2	18.3	3.47	9.0	31.3	456
CACC-32E	13.5	0.8	16	56	30	0.5	43	1	83	2	18.3	3.64	9.0	32.6	478
CACC-33	10	0.5	20	58	40	1	40	1	78	2	18.4	3.56	11.6	41.3	470
CACC-34	15	0.8	30	60	25	0.5	60	1	90	2	22.4	3.34	18.0	60.1	536
CACC-35	13	0.8	15	61	30	0.5	41	1	87	3	18.9	3.47	9.2	31.8	472
CACC-40	13	0.8	15	56	35	0.5	41	1	82	2	17.9	4.05	8.4	34.0	521
CACC-50	16	1	20	70	25	0.5	52	1	102	2	22.7	3.56	14.0	49.8	580
CACC-60	14.4	0.8	31.2	52	30	0.5	60	1	80.8	2	20.8	3.84	16.2	62.4	574
CACC-60B	16	1.0	20	60	35	1	52	1	92	2	20.7	4.98	12.0	59.8	740
CACC-62	14.4	0.8	41.2	62	30	0.5	70	1	90.8	2	24.8	3.84	25.5	98.2	685
CACC-63	16	1	20	70	30	0.5	52	1	102	3	22.7	4.27	14.0	59.8	695
CACC-64	16	1	20	43	45	1	52	1	75	2	17.3	6.41	8.6	55.1	795
CACC-64B	14	0.8	20	48	45	1	48	1	76	2	17.7	5.61	9.6	53.8	710

铁芯型号 Code	a (mm) ±		b ^{ref} (mm)	c ^{ref} (mm)	d (mm) ±		e (mm) ±		f (mm) ±		Lm (cm)	Ac (cm ²)	Wa (cm ²)	WaAc (cm ⁴)	Mass (g)
CACC-65	16	1	20	58	45	1	52	1	90	2	20.3	6.41	11.6	74.3	933
CACC-66	15	0.8	29	60	40	1	59	1	90	2	22.2	5.34	17.4	92.9	850
CACC-66B	14.4	0.8	51.2	82	30	0.5	80	1	110.8	3	30.8	3.84	42.0	161.4	851
CACC-70	20	1	40	60	30	0.5	80	1	100	3	25.9	5.34	24.0	128.2	994
CACC-71	14.4	0.5	31.2	62	30	0.5	60	1	90.8	2	22.8	3.84	19.3	74.4	630
CACC-74	20	1	26	63	30	0.5	66	1	103	3	23.7	5.34	16.4	87.5	910
CACC-80	16	1	20	70	40	1	52	1	102	3	22.7	5.70	14.0	79.7	927
CACC-84	12	0.8	30	60	20	0.5	54	1	84	2	21.4	25.14	18.0	38.4	328
CACC-95	15	0.8	60	64	15	0.5	90	1	94	2	29.2	2.00	38.4	76.9	419
CACC-100	16	1	20	70	45	1	52	1	102	3	22.7	6.41	14.0	89.7	1043
CACC-110	16	1	25	75	45	1	57	1	107	3	24.7	6.41	18.8	120.2	1135
CACC-117	20	1	35	77	20	0.5	75	1	117	3	28.3	3.56	27.0	95.9	724
CACC-118	20	1	32	80	20	0.5	72	1	120	3	28.3	3.56	25.6	91.1	724
CACC-120	14.4	0.8	41.2	70	30	0.5	70	1	98.8	2	26.4	3.84	28.8	110.9	729
CACC-125	19	1	25	83	35	0.5	63	1	121	3	27.2	5.92	20.8	122.8	1157
CACC-128	22	1	35	84	25	0.5	79	1	128	4	30.4	4.90	29.4	143.9	1067
CACC-130	19.4	1	41.2	80	30	0.5	80	1	118.8	3	30	5.18	33.0	170.7	1115
CACC-135	20	1	40	92	30	0.5	80	1	132	4	32.3	5.34	36.8	196.5	1240
CACC-140	26	1	45	88	30	0.5	97	1	140	4	34.4	6.86	39.6	271.8	1696
CACC-140A	26	1	45	88	40	1	97	1	140	4	34.4	8.94	39.6	354.2	2210
CACC-160	19	1	25	83	40	1	63	1	121	3	27.2	6.76	20.8	140.4	1322
CACC-168S	20.4	0.5	30	154	20	0.5	70.8	1	195	4	42.9	3.63	46.3	168.0	1118
CACC-180	25	1	35	65	30	0.5	85	1	115	3	27.5	6.68	22.8	151.9	1318
CACC-193	40	1	50	113	40	1	130	1	193	4	44.7	13.92	56.5	786.5	4462
CACC-200	19	1	25	83	50	1	63	1	121	3	27.2	8.46	20.8	175.4	1652
CACC-200B	14	0.8	35	93	68.3	1	63	1	121	3	29.7	8.51	32.6	277.0	1811
CACC-210	40	1	50	130	50	1	130	2	210	4	48.1	17.40	65.0	1131.0	6002
CACC-245*	16.5	1	38	74	60	1	71	1	107	3	27.2	8.81	28.1	247.8	1723
CACC-250	19	1	25	90	60	1	63	1	128	3	28.6	10.15	22.5	228.3	2085
CACC-270	20	1	30	70	60	1	70	1	110	3	25.9	10.68	21.0	224.3	1988
CACC-275	25	1	35	78	50	1	85	1	128	3	30.1	11.13	27.3	303.7	2404
CACC-310	25	1	82	90	25	0.5	132	1	140	4	41.7	5.56	73.8	410.5	1667
CACC-315	25	1	78	100	25	0.5	128	2	150	4	43.1	5.56	78.0	433.9	1721
CACC-320	22	1	35	85	50	1	79	2	129	4	30.6	9.79	29.8	291.3	2148
CACC-320B	22	1	35	105	50	1	79	1	149	4	34.6	9.79	36.8	359.8	2429
CACC-340	26	1	80	104	30	0.5	132	2	156	4	44.5	6.86	83.2	571.1	2190
CACC-367S	25.8	1	67	97.8	25	0.5	118.6	1.5	149.4	4	40.6	5.68	65.5	371.9	1652

铁芯型号 Code	a (mm) ±		b ^{ref} (mm)	c ^{ref} (mm)	d (mm) ±		e (mm) ±		f (mm) ±		Lm (cm)	Ac (cm ²)	Wa (cm ²)	WaAc (cm ⁴)	Mass (g)
CACC-380	30	1	86	95	30	0.5	146	2	155	4	45.1	7.92	81.7	647.1	2565
CACC-385	19.8	1	35	89.5	70	1	74.6	1	129.1	3	30.8	12.34	31.3	386.4	2725
CACC-400	22	1	35	85	65	1	79	1	129	3	30.4	12.73	29.8	378.6	2777
CACC-410	32	1	50	113	40	1	114	1	177	4	42.1	11.26	56.5	636.4	3407
CACC-415	22	1	46	72	80	1.5	90	1	116	3	30.0	15.66	33.1	518.8	3373
CACC-435	28	1	70	126	20	0.5	126	2	182	4	47.7	4.93	88.2	434.6	1686
CACC-455*	17	1	40	84	90	1.5	74	1	118	3	29.8	13.62	33.6	457.5	2912
CACC-500	25	1	40	85	55	1	90	1	135	3	32.3	12.24	34.0	416.1	2741
CACC-509B	23.7	1	25	78	40	1	72.4	1	125.4	3	27.7	8.44	19.5	164.5	1678
CACC-520	17	1	40	84	90	1.5	74	1	118	3	29.8	13.62	33.6	457.5	2912
CACC-570A	25	1	40	100	45	1	90	1	150	3	35.5	9.90	40.0	396.0	2523
CACC-570B	25	1	40	100	50	1	90	1	150	3	35.5	11.00	40.0	440.0	2804
CACC-630	25	1	40	85	70	1	90	1	135	4	32.3	15.58	34.0	529.6	3615
CACC-640	32	1	74	118	40	1	138	2	182	4	47.9	11.26	87.3	983.6	3876
CACC-650	40	1	40	115	40	1	120	2	195	4	43.1	13.92	46.0	640.3	4302
CACC-660	40	1	80	80	40	1	160	2	160	4	44.1	13.92	64.0	890.9	4402
CACC-664	33	1	40	208	85	1.5	106	1.5	274	5	59.5	24.68	83.2	2053.7	10535
CACC-800A	25	1	40	85	85	1.5	90	1	135	4	32.3	18.91	34.0	643.0	4390
CACC-800B	30	1	40	95	85	1.5	100	1	155	4	35.9	22.44	38.0	852.7	5784
CACC-905	32	1	54	118	50	1	118	1	182	4	44.1	14.08	63.7	897.2	4458
CACC-920*	21.5	1	60	90	90	1.5	103	1	133	3	36.1	17.22	54.0	929.9	4470
CACC-1000	33	1	40	105	85	1.5	106	1.5	171	5	38.9	24.68	42.0	1036.7	6884
CACC-1050	40	1	50	100	70	1	130	2	180	5	42.1	24.36	50.0	1218.0	7353
CACC-1200	40	1	79	130	70	1	159	2	210	4	53.9	24.36	102.7	2501.8	9417
CACC-1300	40	1	86	150	70	1	166	2	230	4	59.3	24.36	129.0	3142.4	10362
CACC-1400	40	1	64	120	80	1.5	144	2	200	4	48.9	27.84	76.8	2138.1	9763
CACC-1500	40	1	64	160	80	1.5	144	2	240	5	56.9	27.84	102.4	2850.8	11362
CACC-1600	45	1	45	145	95	1.5	135	2	235	5	51.6	36.98	65.3	2412.9	13703
CACC-1725	63.5	1	38.1	97.8	90	1.5	165	2	224.8	4	46.8	49.15	37.3	1831.4	16507
CACC-1750	61	1	45	140	70	1	167	2	262	4	55.6	36.72	63.0	2313.5	14670
CACC-1800	33	1	75	240	60	1	141	2	306	5	72.5	17.42	180.0	3136.3	9070
CACC-2000	60	1	60	150	35	0.5	180	2	270	4	60.3	18.06	90.0	1625.4	7822
CACC-2950*	28	1	78	128	120	1.5	134	2	184	3	49.7	29.23	99.8	2918.5	10419
CACC-3604	40	1	64	200	80	1	144	2	280	4	64.9	27.84	128.0	3563.5	12961
CACC-10000	75	1	50	150	144	1.5	200	2	300	5	62.9	92.88	75.0	6966.0	41923
CACC-25000	80	1	60	180	80	1.5	220	2	340	5	72.6	55.04	108.0	5944.3	28694
CACC-30000	75	1	72	385	75	1	222	2	535	5	114.4	48.38	277.2	13409.6	39748

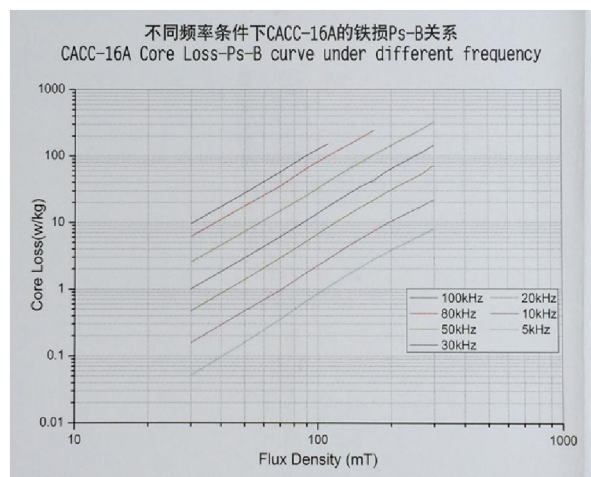
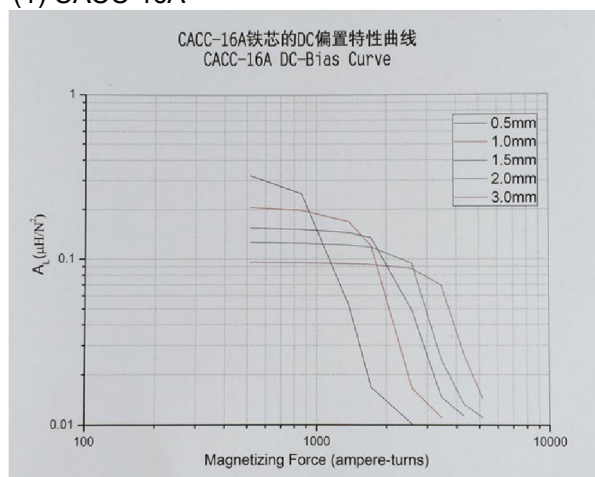
注: 可根据客户要求, 设计制作其他规格铁芯尺寸和性能, ref为参考值, *为非对称切割

Note: Welcome other specification concerning customer's demand.

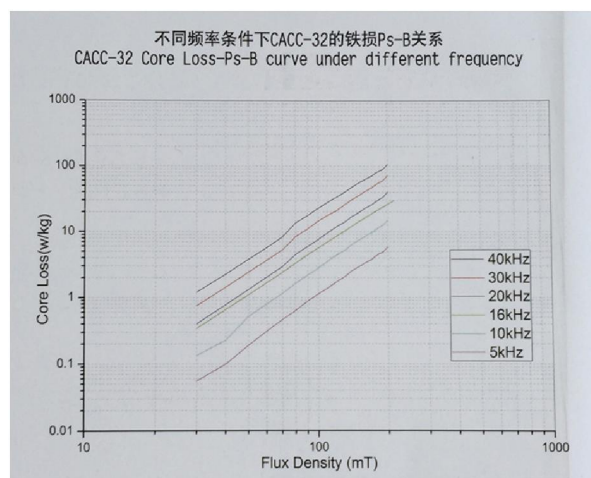
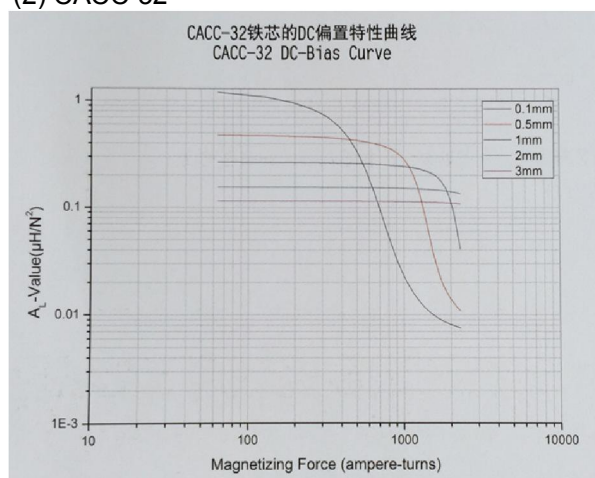
ref is for reference, "*" refers to asymmetric cutting.

典型电磁性能曲线 Performance Curve

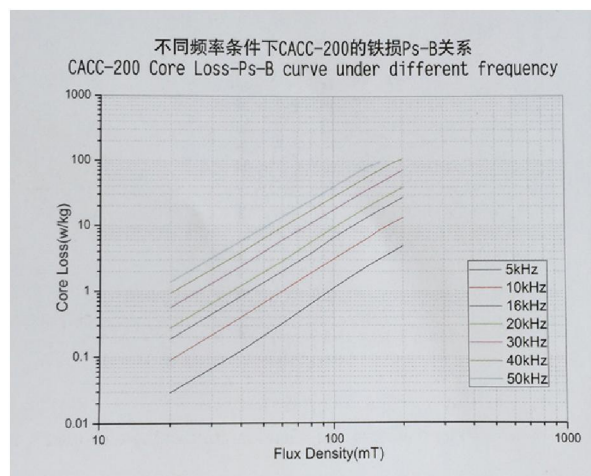
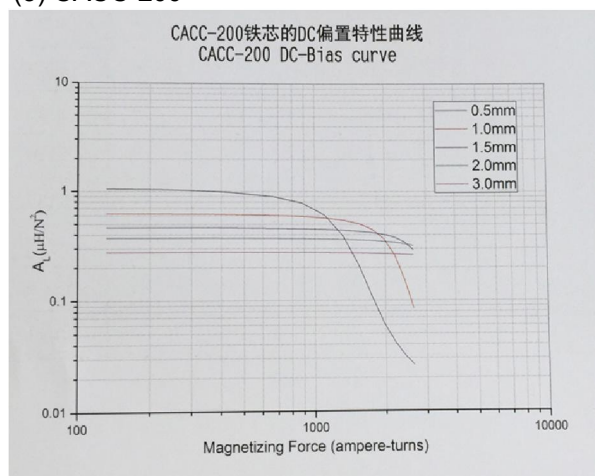
(1) CACC-16A



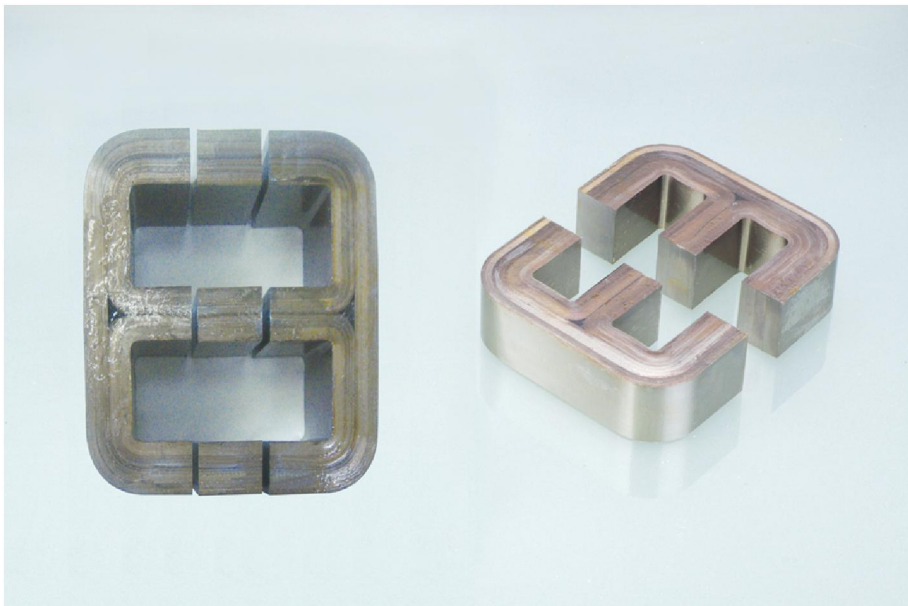
(2) CACC-32



(3) CACC-200



铁基非晶E型铁芯 / Iron-based Amorphous E-Cores



E型HSD铁芯产品规格表 HSD E-cores Specification

	a - 叠厚; b - 窗宽; c - 窗高; d - 高度; e - 宽度; f - 长度; Mass - 质量 a - core build; b - window width; c - window height; d - strip width; e - core width; f - core length; Mass - weight
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铁芯型号 Code	a (mm)	±	b ^{ref} (mm)	c ^{ref} (mm)	d (mm)	±	e (mm)	±	f (mm)	±	Mass ^{ref} (g)
CACC(E) - 47	15	0.8	25	47	30	0.5	95	1	77	2	891
CACC(E) - 200	22	0.8	25	70	30	0.5	116	2	114	3	1743
CACC(E) - 273	24	0.8	38	85	40	1	148	2	133	3	3139
CACC(E) - 300	25	0.8	25	78	40	1	125	2	128	3	2889
CACC(E) - 331	22	0.8	40	87	50	1	146	2	131	3	3643
CACC(E) - 900	25	0.8	40	118	50	1	155	2	167.5	3	5016
CACC(E) - 950	32	1	40	64	50	1	176	2	128	3	5132
CACC(E) - 1200	30	1	55	120	35	0.5	200	2	180	3	4832
CACC(E) - 1406	35	1	45	120	85	1.5	195	2	190	3	13435
CACC(E) - 3000	50	1	64	100	80	1.5	278	2	200	3	20311

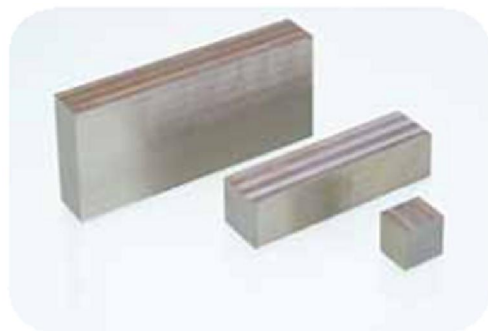
注： 可根据客户要求，设计制作其他规格铁芯尺寸和性能，ref为参考值

Note: Welcome other specification concerning customer's demand. "ref" is for reference.

铁基非晶块铁芯 Iron-based Amorphous Blocked Cores

应用领域 Application

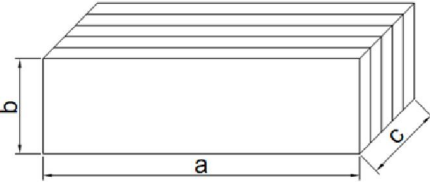
- 光伏逆变器用非晶电抗器铁芯
Reactor cores for PV inverter
- 高频大功率开关电源用输出滤波电抗器
Filter reactor of high frequency super switching power supply



性能特点 Characteristics

- 高饱和磁感应强度 - 减小磁芯体积
High saturate induction - Reducing core volume
- 自由组合叠加结构 - 便于线圈装配及大功率器件设计
Free combination - Easy for coil assembling and high power design
- 气隙多 - 优良的抗直流偏置饱和能力、减少温升
Dispersed gaps - Good for anti-DC-bias-saturation and anti-temperature-rising
- 低损耗 - 提高效率(硅钢的10~20%)
Low core loss - increase efficiency (10~20% no-load loss compared to silicon steel)
- 良好的稳定性 - 可在-50~150°C长时间工作
Good stability - Stable working from -50~150°C

非晶块铁芯产品规格表 Amorphous Block Cores Specification

	a - 磁芯长度; b - 磁芯宽度; c - 磁芯叠厚; Ac - 有效截面积; Mass - 质量 a - core length; b - core width; c - core build-up; Ac - section area; Mass - weight
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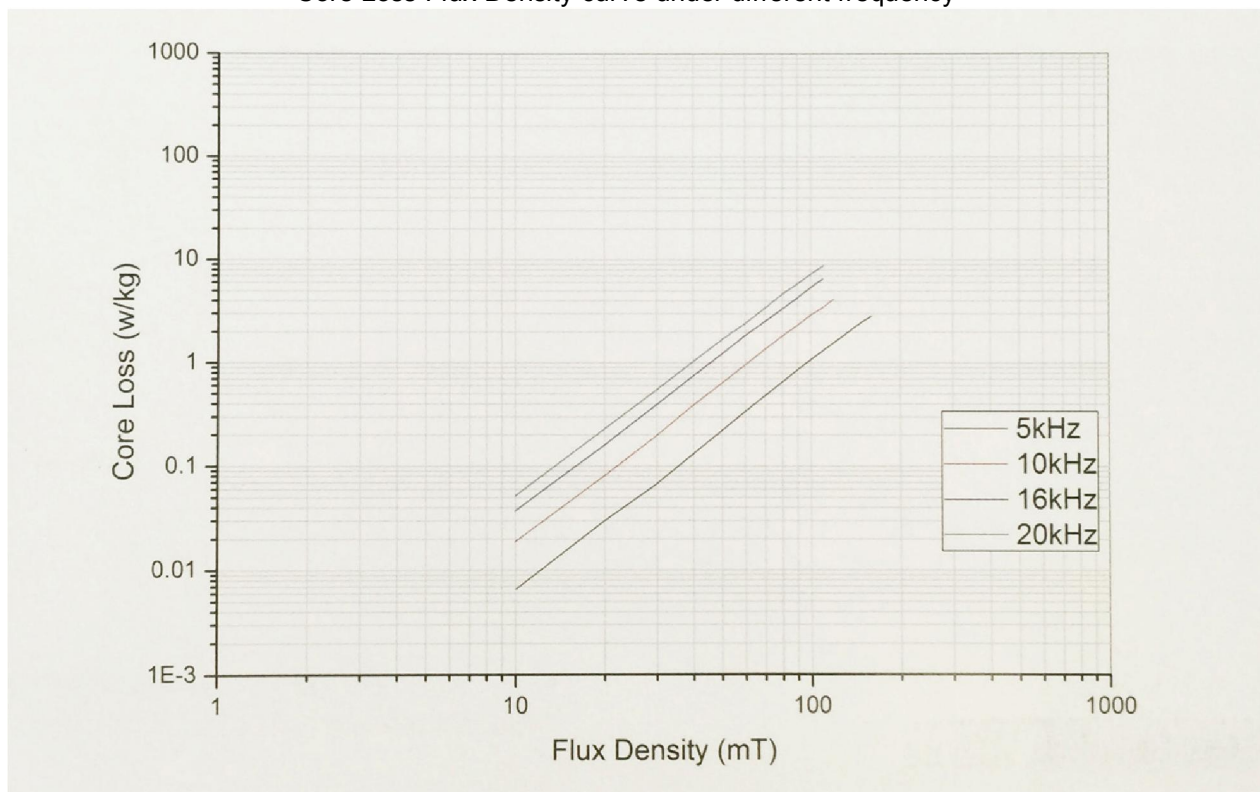
铁芯型号 Code	a (mm)	±	b (mm)	±	c (mm)	±	Ac ^{ref} (mm ²)	Mass ^{ref} (g)
CABC-090002000300	90	0.5	20	0.5	30	0.5	522	344
CABC-082502500250	82.5	0.5	25	0.5	25	0.5	544	329
CABC-127002500250	127	0.8	25	0.5	25	0.5	544	506
CABC-130002500300	130	0.8	25	0.5	25	0.5	544	518
CABC-160002500600	160	1	25	0.5	60	1	1298	1520
CABC-085003000700	85	0.5	30	0.5	70	1	1817	1131
CABC-090003000800	90	0.5	30	0.5	80	1	2076	1368
CABC-090003000850	90	0.5	30	0.5	85	1	2206	1454
CABC-100003000850	100	0.8	30	0.5	85	1	2206	1615
CABC-110003000290	110	0.8	30	0.5	29	0.5	757	610
CABC-110003000350	110	0.8	30	0.5	35	0.5	914	891
CABC-140003000350	140	0.8	30	0.5	35	0.5	914	1743
CABC-110003000850	110	0.8	30	0.5	85	1	2206	3139
CABC-160003000850	160	1	30	0.5	85	1	2206	2889
CABC-180003000700	180	1	30	0.5	70	1	1817	3643
CABC-180003000800	180	1	30	0.5	80	1	2076	5016
CABC-180003000850	180	1	30	0.5	85	1	2206	5132
CABC-120003500850	120	0.8	35	0.5	85	1	2573	4832
CABC-140003500357	140	0.8	35	0.5	32.7	0.5	1087	13435
CABC-155003500950	155	1	35	0.5	95	1	2876	20311
CABC-285003500850	285	1	35	0.5	85	1	2573	5371
CABC-060004000130	60	0.5	40	0.5	13	0.5	452	199
CABC-150004000600	150	1	40	0.5	60	1	2076	2281
CABC-155004500397	155	1	45	0.5	39.7	0.5	1554	1764
CABC-122005000700	122	0.8	50	0.5	70	1	3027	2705
CABC-175005000650	175	1	50	0.5	65	1	2811	3603
CABC-230005000700	230	1	40	0.5	70	1	3028	5100

注： 可根据客户要求，设计制作其他规格尺寸的非晶块铁芯，ref为参考值。

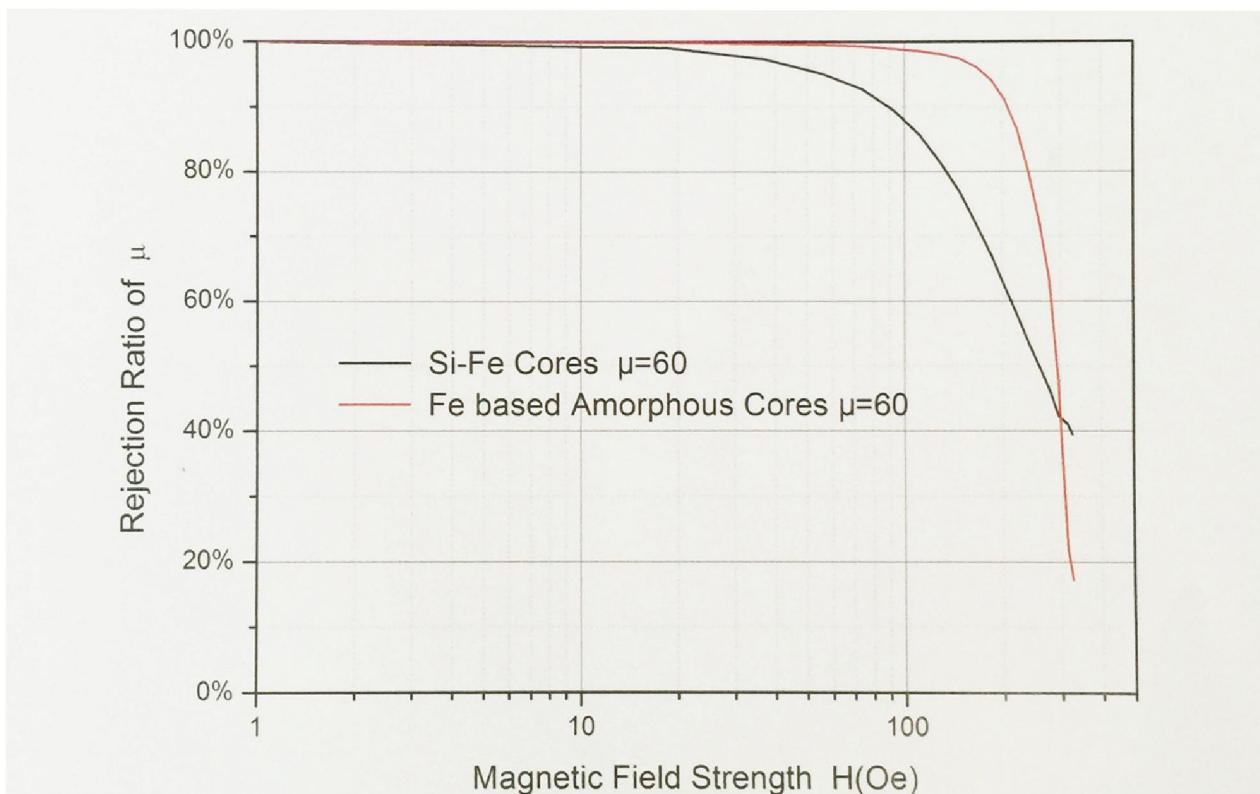
Note: Welcome other specification concerning customer's demand.

性能曲线 Performance Curve

不同频率条件下非晶块铁芯的损耗随磁感应强度变化曲线
Core Loss-Flux Density curve under different frequency



铁基非晶块和铁硅磁粉芯的抗直流特性对比曲线



EMC纳米晶共模滤波电感铁芯 Nano-crystalline EMC Common Mode Choke Core

应用领域 Application

- 开关电源 Solar inverters
- 光伏逆变 Switched-mode power supplies
- 变频器 Frequency converter
- EMC滤波器 EMC filters
- 电焊机 Welding equipment
- 风能发电 Wind generators
- 电动汽车 Automotive applications
- 电磁炉 Inductive cooking
- 不间断电源 Uninterrupted Power Supply (UPS)



性能特点 Characteristics

- 高Bs, 高 μ 值, 具有搞的抗饱和能力, 能有效的降低电感尺寸, 如图1所示为共模电感磁芯静态磁滞回线; High Bs & μ , easy to design, reduce core geometry effectively. Fig 1 shows the curve of magnetic hysteresis loop for different permeability.
- 优良的频率特性, 如图3所以为磁芯磁导率随频率变化曲线; Excellent frequency character, see Fig 3.
- 稳定的温度特性, 如图4所示为铁芯磁导率变化率随温度变化的曲线; Stable temperature character, see Fig 4
- 优良高频率阻抗特性; Excellent impedance character.
- 磁滞伸缩系数小, 噪音低; Low magnetostriction coefficient, low noise.

性能指标 Performance Index

项目 / Item	单位 / Unit	参考值 / Reference Value
饱和磁感强度 (Bs) Saturated induction density	T	1.2
初始磁导率 (μ_i) Permeability	Gs/Oe	8.5×10^4
磁导率 (10kHz) Permeability	Gs/Oe	8.0×10^4
磁导率 (100kHz) Permeability	Gs/Oe	2.0×10^4
居里温度 (Tc) Curie Temperature	°C	570
密度 (ρ) Density	g/cm ³	7.2
电阻率 (δ) Resistivity	$\mu\Omega \cdot \text{cm}$	$\Rightarrow 130$
填充系数 (k) Stacking Factor	---	$\Rightarrow 0.8$

产品规格 Specification

产品编码说明: NC 0001 L w 01
 Code introduction: 纳米磁芯 规格序号 低剩磁 护盒颜色: w白色,b黑色,c喷涂 特征码
 Nanocrystalline Core Specification No Low Br Case color: w(hite), b(lack), c(oating) Feature No

产品料号/PN#		铁芯尺寸/Dimension OD*ID*H (mm)		截面积 Cross section	磁路长度 Magnetic Path	铁芯 重量 Weight	磁导率 Permeability (μ at 10kHz)		单匝电感量 AL Nominal μ H		饱和电流 SAT Current Typical A	
NICORE	VAC	铁芯尺寸 Core	成品尺寸 Finished core	Afe cm ²	lfe cm	mFe g	指定范围值 Specified value	设计参考值 Design ref.	10kHz	100kHz	10kHz	100kHz
NC-0100-L-c-02	W620	16x12.5x6	17.8x10.7x8	0.08	4.5	2.6	50000 $\leq\mu'\leq$ 96700	67000	15	4.8	0.5	0.8
NC-0100-L-c-01	W619					2.6	20000 $\leq\mu'\leq$ 38700	26800	6	3.9	1.1	1.7
NC-00035-L-c	W867	22x17x16	24x15.2x8	0.12	6.1	5.4	50000 $\leq\mu'\leq$ 96700	67000	16.4	4.3	0.6	1.2
NC-0088-L-c-01	W622	25x20x10	27.3x17.5x12.3	0.19	7.1	9.9	50000 $\leq\mu'\leq$ 96700	67000	22.5	7.2	0.7	1.4
NC-0088-L-c-02	W621					9.9	20000 $\leq\mu'\leq$ 38700	26700	9	5.8	1.7	2.7
NC-0088-L-c-03	W676	30x25x15	32.3x22.7x17.5	0.27	8.6	17.4	50000 $\leq\mu'\leq$ 96700	66000	26.5	8.5	0.9	1.7
NC-0088-L-c	W911	30x20x10	32.5x17.8x12.5	0.40	7.9	23.1	65600 $\leq\mu'\leq$ 127000	87000	56	13.4	0.6	1.2
NC-0015-L-c	W624	40x32x15	42.3x29.1x17.8	0.44	11.3	36	50000 $\leq\mu'\leq$ 96700	67000	32.5	10.3	1.1	2.2
NC-0015-L-c-01	W623					36	20000 $\leq\mu'\leq$ 38700	26700	13	8.4	2.8	4.3
NC-0015-L-c-02	W886	45x32x15	47.3x29.8x17.8	0.71	12.1	63.3	20000 $\leq\mu'\leq$ 38700	26600	19.7	12.8	3	4.6
NC-0016-L-c-01	W626	50x40x20	52.3x37.1x22.8	0.73	14.1	76	50000 $\leq\mu'\leq$ 96700	66000	43	13.8	1.4	2.7
NC-0016-L-c-02	W625					76	20000 $\leq\mu'\leq$ 38700	26100	17	11.2	3.6	5.4
NC-0299-L-c	W627	63x50x20	65.5x46.6x27.8	0.95	17.8	124	20000 $\leq\mu'\leq$ 38700	26700	18	11.6	4.4	6.7
NC-0299-L-c-01	W721					124	12900 $\leq\mu'\leq$ 25000	20000	11.5	10.4	6.9	8.7
NC-0300-L-c	W628	80x63x20	83x59.5x22.8	1.24	22.5	205	20000 $\leq\mu'\leq$ 38700	26700	18.5	12	5.6	8.5
NC-0300-L-c-01	W722					205	12900 $\leq\mu'\leq$ 25000	17300	11.9	10.7	8.7	11
NC-0230-L-c	W629	100x80x20	107x75x23	1.46	28.3	303	20000 $\leq\mu'\leq$ 38700	26700	17.3	11.2	7.1	10.7
NC-0230-L-c-01	W723					303	12900 $\leq\mu'\leq$ 25000	17300	11.2	10	10.9	13.8
NC-0186-L-c-01	W567	130x100x25	134.5x95x28.5	2.85	36.1	757	37500 $\leq\mu'\leq$ 72500	50000	50	19.4	4.8	8.5
NC-0186-L-c	W630			2.74	36.1	727	20000 $\leq\mu'\leq$ 38700	26600	25.4	16.5	9	13.6
NC-0186-L-c-02	W587			2.74	36.1	727	12900 $\leq\mu'\leq$ 25000	17200	16.4	14.7	14	17.7
NC-0032-L-c	W631	160x130x25	165x125x28.5	2.74	45.6	917	20000 $\leq\mu'\leq$ 38700	26700	20.1	13.1	11.3	17.1
NC-0032-L-c-01	W720					917	12900 $\leq\mu'\leq$ 25000	17200	13	11.7	17.6	22.3
NC-0209-L-c-01	V105	194x155x25	200x149x28.5	3.71	54.8	1490	40000 $\leq\mu'\leq$ 77300	53000	45.3	14.7	6.9	12.5
NC-0209-L-c	W908					1490	12900 $\leq\mu'\leq$ 25000	17600	14.7	13.2	20.7	26.4

产品料号/PN#		铁芯尺寸/Dimension OD*ID*H (mm)		截面积 Cross section	磁路长度 Magnetic Path	铁芯 重量 Weight	磁导率 Permeability (μ at 10kHz)		单匝电感量 AL Nominal μ H		饱和电流 SAT Current Typical A	
NICORE	VAC	铁芯尺寸 Core	成品尺寸 Finished core	Afe cm ²	lfe cm	mFe g	指定范围值 Specified value	设计参考值 Design ref.	10kHz	100kHz	10kHz	100kHz
NC-0178-L-w	W914	9.8x6.5x4.5	11.2x5.1x5.8	0.06	2.6	1.1	65600 $\leq\mu'\leq$ 127000	87000	25.5	6.4	0.2	0.4
NC-0010-L-w	W902	12x8x4.5	14.1x6.6x6.3	0.07	3.1	1.7	72000 $\leq\mu'\leq$ 139000	97000	28	6.8	0.2	0.4
NC-0226-L-w	W498	12.5x10x5	14.3x8.5x7	0.05	3.5	1.3	42200 $\leq\mu'\leq$ 81500	56000	10	3.6	0.4	0.8
NC-0039-L-w	W865	15x10x4.5	17.1x7.9x6.5	0.09	3.9	2.6	72000 $\leq\mu'\leq$ 139000	94000	27	6.7	0.3	0.5
NC-0217-L-w	W403	16x10x6	17.9x8.1x8.1	0.14	4.1	4	72000 $\leq\mu'\leq$ 135000	97000	43	10.1	0.3	0.6
NC-0217-L-w-01	W308					4	18000 $\leq\mu'\leq$ 35000	23700	11.7	6.5	1.2	1.7
NC-0179-L-w	W515	17.5x12.6x6	19x11x8	0.12	4.7	4.1	72000 $\leq\mu'\leq$ 135000	96000	30	6.9	0.3	0.7
NC-0044-L-w-01	W838	19x15x10	21.2x13x12.3	0.16	5.3	6.3	72000 $\leq\mu'\leq$ 130000	96000	36.1	8.8	0.4	0.7
NC-0038-L-w	W409	20x12.5x8	22.6x10.3x10.2	0.24	5.1	9	72000 $\leq\mu'\leq$ 135000	97000	55.2	13.6	0.4	0.7
NC-0038-L-w-01	W450					9	18100 $\leq\mu'\leq$ 35000	23700	14.3	9.1	1.4	2.1
NC-0088-L-w-03	W523	25x20x10	27.6x17.4x12.8	0.20	7.1	10.4	60000 $\leq\mu'\leq$ 116000	80000	28.4	7.3	0.6	1.1
NC-0141-L-w-01	W380	25x16x10	27.9x13.6x12.5	0.36	6.4	17	72000 $\leq\mu'\leq$ 135000	95000	65.6	15.5	0.4	0.9
NC-0141-L-w-02	W451					17	15000 $\leq\mu'\leq$ 35000	24300	17	11.5	1.7	2.6
NC-0141-L-w-04	W980					17	3300 $\leq\mu'\leq$ 6400(100kHz)	4400	3.2	3.1	9.3	9.6
NC-0008-L-w-01	W423	30x20x10	32.8x17.6x12.5	0.40	7.9	23	72000 $\leq\mu'\leq$ 135000	103000	59.3	14	0.5	1
NC-0141-L-w-14	W358					23	19500 $\leq\mu'\leq$ 35200	25500	15.5	11.1	2.1	3.1
NC-0141-L-w-11	W981					23	3280 $\leq\mu'\leq$ 6400(100kHz)	4400	2.9	2.8	11.4	11.8
NC-0058-L-b	W514	30x20x15	32.8x17.5x17.8	0.57	7.9	33	72000 $\leq\mu'\leq$ 135000	96000	88	20	0.5	1.1
NC-0015-L-w-03	W422	40x32x15	43.1x28.7x18.5	0.46	11.3	38	72000 $\leq\mu'\leq$ 135000	95000	47.2	11.1	0.8	1.5
NC-0015-L-w-04	W452					38	15000 $\leq\mu'\leq$ 29000	20000	12.2	7.9	3.7	5.1
NC-0015-L-w-10	W964					38	3160 $\leq\mu'\leq$ 6300(100kHz)	4300	2.3	2.2	16.6	17.1
NC-0023-L-b-02	W424	40x25x15	43.1x22.5x18.5	0.86	10.2	64	72000 $\leq\mu'\leq$ 135000	94000	101	23.1	0.7	1.4
NC-0023-L-b-06	W453					64	17850 $\leq\mu'\leq$ 34500	23700	25.4	17.2	2.9	4.2
NC-0177-L-b	V102	45x30x15	48.3x26.4x18.2	0.86	11.8	74	72000 $\leq\mu'\leq$ 135000	96000	87.5	20.3	0.8	1.6
NC-0177-L-b-01	V118					74	20000 $\leq\mu'\leq$ 38700	26700	24.3	15.9	3	4.5
NC-0177-L-b-02	V101					74	12900 $\leq\mu'\leq$ 25000	17200	15.7	14.3	4.6	5.8
NC-0016-L-w-02	W516	50x40x20	53.5x36.3x23.4	0.76	14.1	79	50000 $\leq\mu'\leq$ 97000	66000	45.3	14	1.4	2.7
NC-0016-L-w-03	W565					79	20000 $\leq\mu'\leq$ 38700	26600	18	10	3.5	5.3
NC-0017-L-b	W517	63x50x25	67.3x46.5x28.6	1.24	17.8	161	50000 $\leq\mu'\leq$ 97000	67000	58.6	18.1	1.8	3.5
NC-0017-L-b-01	V110					161	20000 $\leq\mu'\leq$ 38700	26500	23.3	13.5	4.4	6.7
NC-0017-L-b-02	W985					163	2850 $\leq\mu'\leq$ 5510(100kHz)	3700	3.3	3.2	30.2	30.9
NC-0147-L-b	V140	80x50x20	86x44.7x25.7	2.28	20.4	342	71250 $\leq\mu'\leq$ 137000	95000	94	28	1.4	2.8
NC-0147-L-b-02	W531					342	18700 $\leq\mu'\leq$ 36300	24900	35	24	5.5	8.2
NC-0147-L-b-04	V091					347	$\geq$ 5170	5170	9.6	9.2	26.4	27.3
NC-0096-L-b-01	W518	90x60x20	95.4x54.7x24.7	2.28	23.6	395	50000 $\leq\mu'\leq$ 97000	67000	81	25.1	24	4.5
NC-0096-L-b-02	W984					400	2800 $\leq\mu'\leq$ 5400(100kHz)	3700	4.6	4.5	40.9	41.8
NC-0188-L-w	V082	100x80x25	105.5x75x29.6	1.90	28.3	379	50000 $\leq\mu'\leq$ 97000	67000	56.3	16.9	2.8	5.3
NC-0188-L-w-01	V081					379	12900 $\leq\mu'\leq$ 25000	17200	14.5	13.1	10.9	13.8
NC-0144-L-b	W468	102x76x25	108.1x70x30.3	2.47	28	508	50000 $\leq\mu'\leq$ 97000	67000	68.8	21.6	3.8	6.7
NC-0144-L-b-02	V080					508	12900 $\leq\mu'\leq$ 25000	17200	19.1	17.2	10.7	13.6
NC-0144-L-b-01	W947					515	2840 $\leq\mu'\leq$ 5480(100kHz)	3800	4.3	4.2	47.4	48.5
NC-0032-L-b-03	V074	160x130x25	166.9x123.9x30.5	2.74	45.6	917	27600 $\leq\mu'\leq$ 59590	36000	26.8	13.7	8.4	13.6
NC-0032-L-b-02	V088			2.74	45.6	917	20000 $\leq\mu'\leq$ 38700	26500	20.1	13.1	11.3	17.1
NC-0032-L-b	V066			2.74	45.6	917	12900 $\leq\mu'\leq$ 25000	17200	12.9	11.7	17.6	22.3
NC-0032-L-b-04	W982			2.85	45.6	967	2800 $\leq\mu'\leq$ 5400(100kHz)	3700	3	2.9	79.3	81.1

性能曲线 Performance Curve

图1、不同类型磁滞回线

Fig. 1 Magnetic hysteresis loop for different permeability

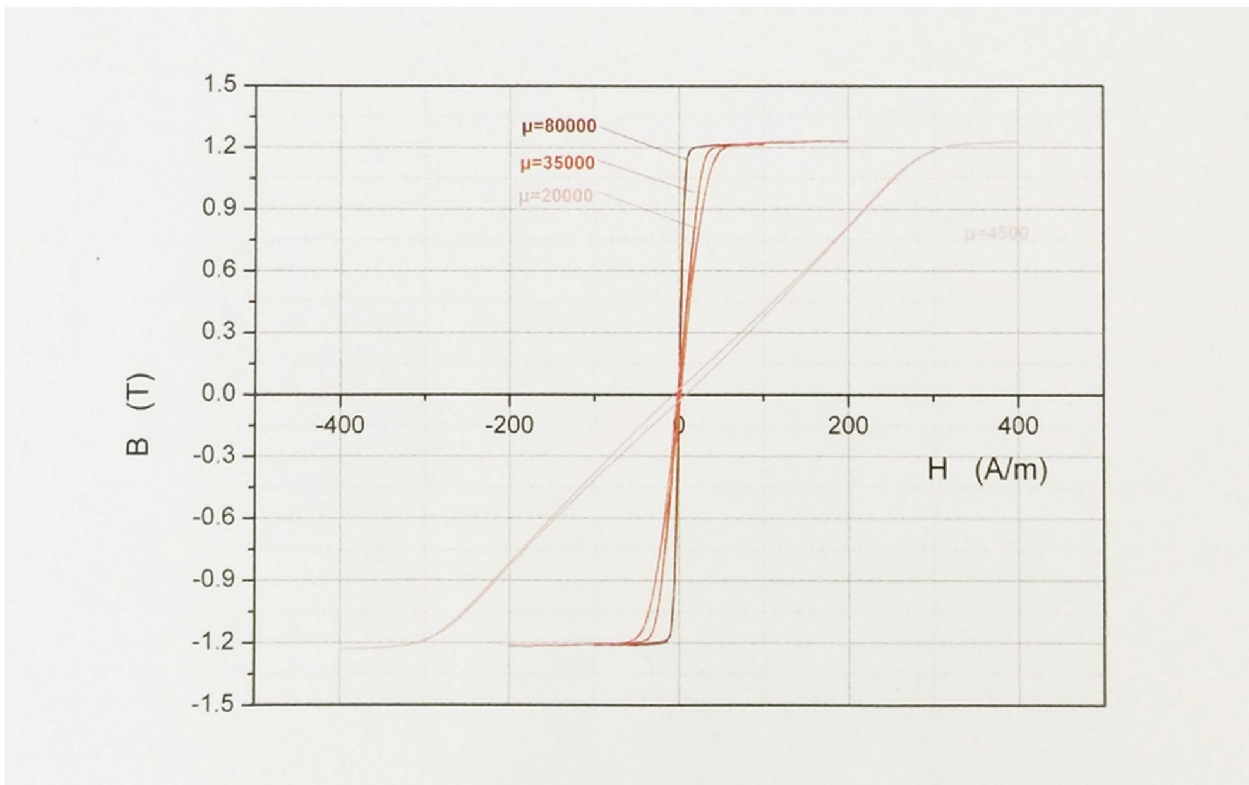
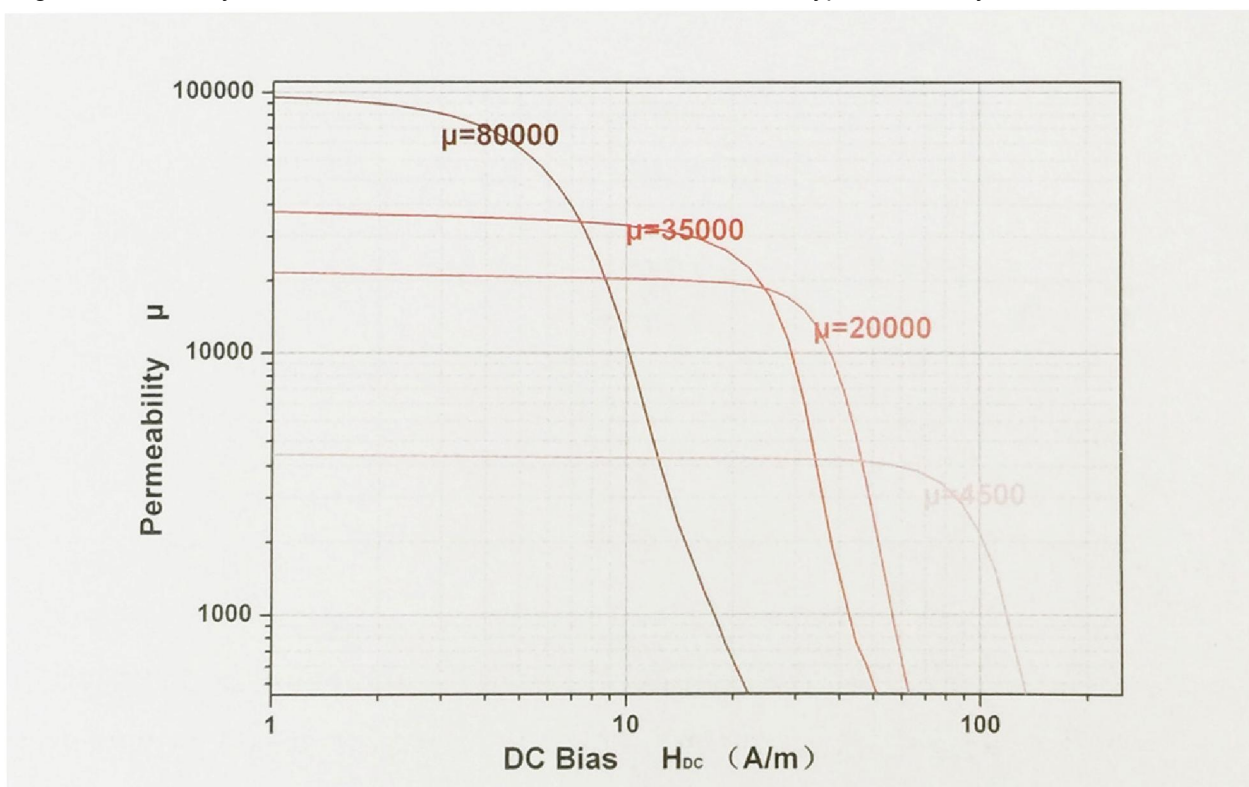


图2、抗偏流特性

Fig. 2 Permeability characteristics under DC bias fields for various type of nanocrystalline



性能曲线 Performance Curve

图3、磁导率频率特性曲线

Fig. 3 Frequency response of the permeability

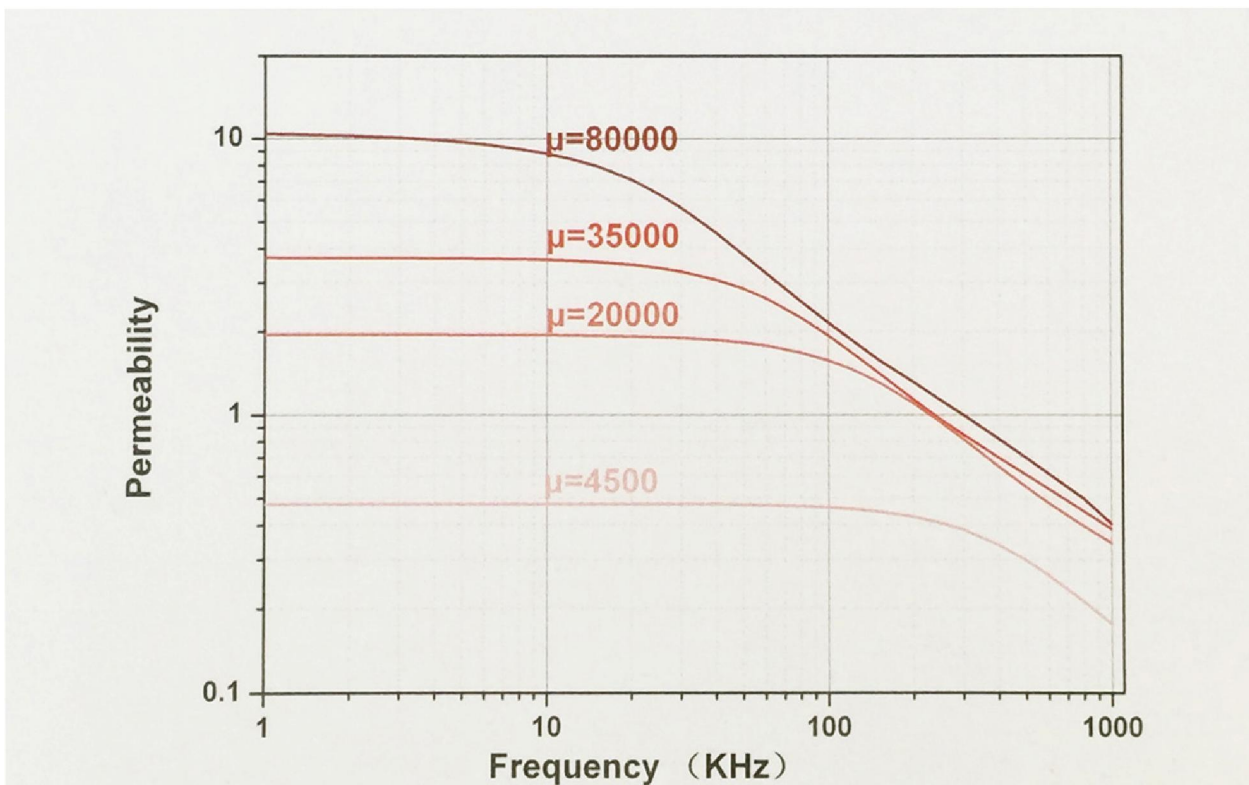
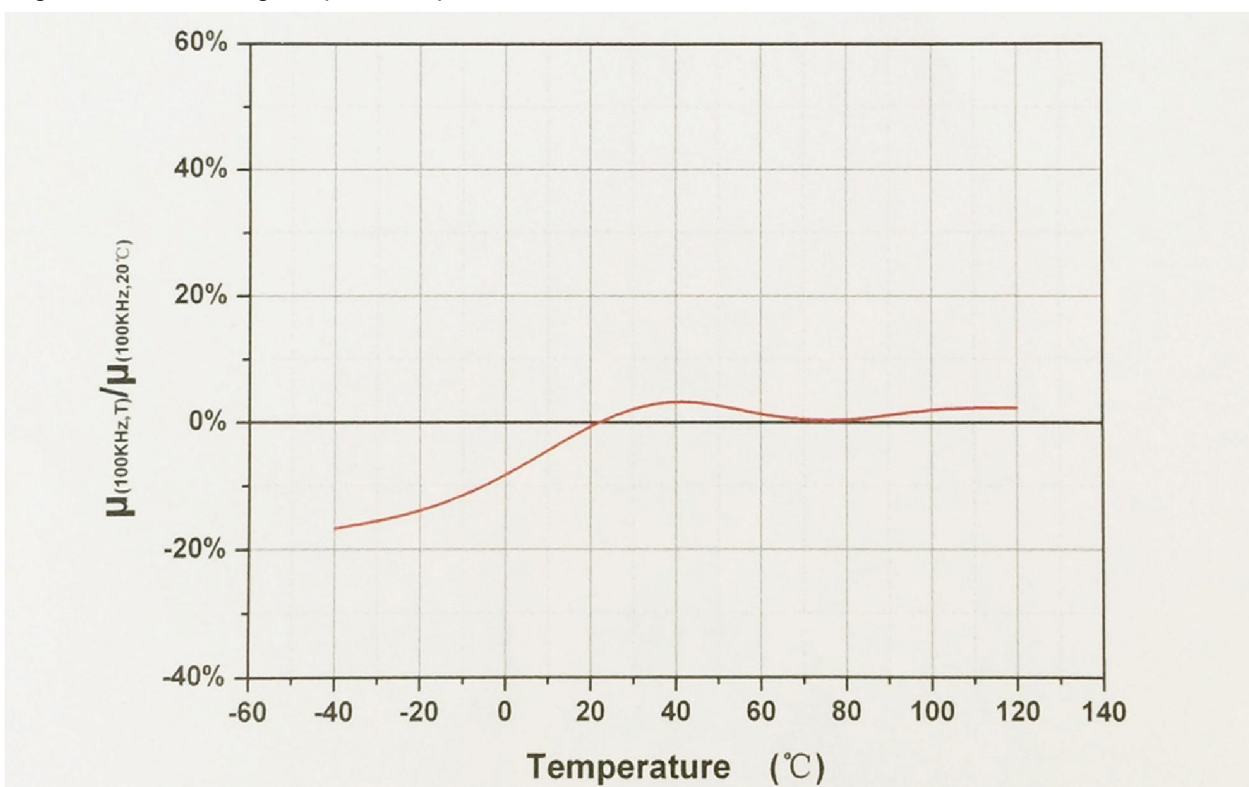


图4、磁导率温度变化曲线

Fig. 4 Realitive change of μ vs Temperature



大功率高频开关电源用变压器

Nano-crystalline Switch Hi-Power Transformer Core(Iron-based)

大功率高频开关电源用变压器，要求变压器磁芯具有低的高频损耗，高的饱和磁密Bs和低的剩余磁密Br以获得大的工作磁密 ΔB ；因此对纳米晶合金采用横磁热处理工艺，可获得低剩磁及横导磁特性的铁芯。

Usually the Hi-Power are welding inverter's single-ended pulse transformers require the transformer cores with low high frequency loss, high Bs and low Br so that to achieve bigger ΔB . Output filter and energy stored inductance required the characteristics of high Bs, low loss and constant permeability, in the case, we made horizontal magnetic treatment on Nano-crystalline alloy to manufacture the transformer cores with low Br and constant permeability.

应用领域 Application

- 逆变焊机电源 Inverter Welding machine power supply
- X光电源、激光电源、通讯设备电源 X-ray, laser, communication power supply
- UPS不间断电源和高频感应加热电源 UPS and high frequency induction heating power supply
- 充电电源 Charging power supply
- 电解电镀电源 Electronic and electroplate power supply
- 变频调速电源 Frequency control of motor speed power supply
- 等离子切割机 Plasma cutting machine



性能特点 Characteristics

- 高饱和磁感应强度 - 有效缩小器件体积，减轻器件质量
High Bs - Reducing volume and weight of the cores.
- 高导磁率低矫顽力 - 提高变压器效率，减小激磁功率
High permeability and low coercive force - Higher efficiency and less excited power of transformer.
- 低剩磁 ($B_r \leq 0.2T$) - 获得更大的磁感应增量，得到更大的输出功率
Low Br ($B_r \leq 0.2T$) - Higher magnetic flux density and output power.
- 低损耗 - 降低变压器的温升，提高变压器效率
Low core loss - Lower temperature rising, higher efficiency of the transformer.
- 优良的温度稳定性 - 可在最高达 $-45^{\circ}C \sim +130^{\circ}C$ 温度下长期工作
Keep stable working at $-45^{\circ}C \sim +130^{\circ}C$ for long time.



性能指标 Performance Index

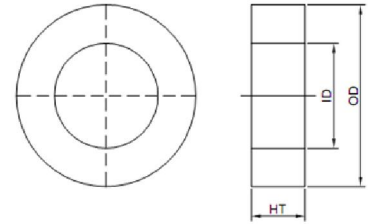
铁基纳米晶铁芯与铁氧体铁芯磁性能对比 Comparison between Nano-crystalline and Ferrite cores

基本磁性参数 Basic magnetic property	纳米晶铁芯 Nano-crystalline	铁氧体铁芯 Ferrite
饱和磁感应强度 Saturate induction Bs (T)	1.25	0.5
剩余磁感应强度 Br (T) (20kHz)	< 0.20	0.2
铁损 Core loss (20kHz/0.5T) (W/Kg)	< 25	---
铁损 Core loss (20kHz/0.32T) (W/Kg)	< 35	---
导磁率 Permeability (20kHz) (Gs/Oe)	> 20,000	2,000
矫顽力 Hc (A/m)	< 1.60	6
饱和磁滞伸缩系数 Magnetostriction (λ_s)	< 2×10^{-6}	4
电阻率 Resistivity δ ($\mu\Omega \cdot cm$)	130	10^6
居里温度 Curie temerature Tc ($^{\circ}C$)	570	< 200
叠片系数 Stacking factor	0.75	---

产品规格 Specification

产品编码说明: NH
Code introduction: 纳米晶开关电源变压器铁芯
Nano-crystalline Current Transformer Cores

0001
产品型号规格
Model Specification



产品牌号 Code No	铁芯尺寸 Core size (mm)			护盒尺寸 Case size (mm)			有效截面积 Ac (cm ²)	磁路长度 Le (cm)	重量 Weight(g)	使用功率 Suitable Power
	OD	ID	HT	OD	ID	HT				
NH-0002	50	32	20	54	28	24	1.35	12.87	125	1-1.5
NH-0003	64	40	20	66	37	23	1.72	16.3	215	1-2
NH-0004	70	40	20	75	36	25	2.03	17.28	265	1-2
NH-0005	70	40	25	72	37	28	2.81	17.3	352	3
NH-0006	80	50	25	85	44	30	2.81	20.4	416	3
NH-0010	100	50	25	105	45	44	4.69	23.56	805	8
NH-0011	100	6	20	105	56	23	2.88	25.1	540	3-4
NH-0014	105	60	30	110	57	35	5	25.9	957	8-10
NH-0015	105	60	40	110	57	34	6.3	26.06	1267	10-15
NH-0018	110	60	20	116	55	25	3.5	26.69	725	5-7
NH-0019	110	60	25	115	54	30	4.37	26.69	907	6-9
NH-0020	110	60	30	115	55	35	5.25	26.69	1081	8-10
NH-0021	120	60	30	125	57	35	6.48	28.2	1384	12-15
NH-0022	120	70	20	125	67	25	3.6	29.8	811	10
NH-0023	120	70	25	125	67	30	4.6	29.8	1014	8-10
NH-0024	120	70	30	125	67	35	5.4	29.8	1217	10-12
NH-0025	120	70	40	125	67	47	7.5	29.8	1538	12-18
NH-0026	130	80	40	136	76	45	7.2	30.3	1793	15-20
NH-0027	130	80	50	136	76	55	9	32.9	2242	20-25
NH-0029	130	90	50	136	85	56	7.5	34.5	1879	20-25
NH-0035	80	50	20	85	44	25	2.1	20.56	332	2-3
NH-0037	130	80	60	135	76	66	11.25	32.99	2700	22-28

注 Note:

- * 以上表格仅列出部分产品，如需其他规格和无护盒铁芯请与我们联系；
- * Welcome other specification concerning customer's demand;
- * 以上各种规格的铁芯在20kHz下所传输的功率，仅为典型值，条件不同，所传输的功率也不同。
- * The performance based on 20kHz only.

纳米晶电流互感器铁芯

Nano-crystalline Current Transformer Cores for Power Use

互感器铁芯的导磁性能越好，测量误差越小，精度越高。要求低安匝数、小变比时，冷轧硅钢达不到测量精度，而坡莫合金铁芯因饱和磁感应强度较低及高成本的缘故使用大大受限。纳米晶合金互感器铁芯因高磁导率及高饱和磁感等优异的磁性能，广泛应用于精密电流互感器、零序电流互感器、PFC、中高频变压器等电气设备中。

The higher CT core permeability, the lower measurement error & higher measurement accuracy. Silicon steel CT core can not get enough measurement accuracy under the situation of low Ampere-turns of small turn ratios. The Fe-Ni Permalloy core's applications are limited due to its low magnetization and high cost. Nano-crystalline cores are getting wider usage for the accuracy grade precision current transformers, because of its high permeability, high magnetization and lower cost in the field of power supply systems, power energy measurement and controlling systems, etc.



性能特点 Characteristics

- 高饱和磁感应强度及高导磁性 - 互感器精度高、精准化、小型化，现行高度；
High permeability & high saturation induction B_s - Increase CT's accuracy, level, smaller volume & high linearity.
- 良好的温度稳定性 - 可在-55℃ ~ +120℃长时间工作。
Good temperature stability - Keep stable from -55℃ ~ +120℃ for long time.

性能指标 Performance Index

项目 Item	指标 Performanc	项目 Item	指标 Performanc
饱和磁感应强度 Saturate induction B_s (T)	1.25	饱和磁滞伸缩系数 Magnetostriction (λ_s)	2.0×10^{-6}
居里温度 Curie temperature T_c (°C)	570	密度 Density ρ (g/cm ³)	7.2
晶化温度 Crystalline temperature T_x (°C)	500	电阻率 Resistivity δ ($\mu\Omega \cdot \text{cm}$)	130
硬度 Hardness Hv	880	厚度 Thickness (μm)	28 ~ 35
初始磁导率 Initial permeability (μ_0)	$>12 \times 10^4$	叠片系数 Stacking factor	≥ 0.75

产品规格 Specification

产品牌号 Part No.	铁芯尺寸 Core Dimension			护盒尺寸 Case Dimension			备注 Remark
	外径 OD	内径 ID	高度 HT	外径 OD	内径 ID	高度 HT	
NR-0004	19	14	6.5	22.2	12	9	
NR-0007	21	16	10	23.8	14.5	12.5	
NR-0008	20	14	10	23.5	12.5	12.5	
NR-0012	26	19	10	29	16.5	12.5	
NR-0014	40	30	10	43	27.5	12.5	
NR-0017	40	30	15	43	27.5	17.5	
NR-0019	83	38	40	88	34	45	
NR-0020	71	39	33	76	35	38	
NR-0021	70	42	30	75	3	35	
NR-0022	68	45	30	73	41	35	
NR-0023	68	45	25	73	41	30	
NR-0024	78	60	25	83	56	30	
NR-0025	80	60	30	85	56	35	
NR-0026	82	63	30	87	59	35	
NR-0027	70	40	25	75	36	30	
NR-0028	82	45	50	87	41	55	
NR-0029	82	45	30	87	41	35	
NR-0030	85	45	60	90	40	65	
NR-0031	85	50	30	90	46	35	
NR-0032	80	50	35	85	46	40	
NR-0033	86	60	40	91	56	45	
NR-0034	78	60	35	83	56	40	
NR-0038	115	85	20	120	81	25	
NR-0119	78	60	30	83	56	35	
NR-0120	88	50	40	93	46	45	
NR-0121	120	95	20	125	91	25	
NR-0122	83	30	50	88	26	55	
NR-0123	80	50	30	85	46	35	
NR-0125	80	50	25	85	46	30	
NR-0126	90	73	30	95	69	35	
NR-0128	90	43	40	95	39	45	
NR-0129	88	60	35	93	56	40	
NR-0130	110	90	45	115	86	50	
NR-0131	100	75	20	105	71	25	
NR-0137	115	85	25	120	81	20	
NR-0138	120	95	15	125	91	20	
NR-0139	120	85	20	125	81	25	
NR-0078	265	210	10	271	203	17	
NR-0079	220	180	20	227	172	25	
NR-0080	220	180	30	227	172	35	
NR-0086	560	470	12	572	458	18	

注 Note:

铁芯为环型、矩型、跑道型等，可根据客户规格制作。

Core shapes can be round, rectangular & course types, other sizes possible concerning customer's demand.

护盒材质为PBT、PA66、DMC、铸铝、不锈钢、树脂涂装。

Case material can be PBT, PA66, DMC, AL, Stainless cased or resinous coated types.

纳米晶互感器铁芯磁化曲线数据表(B-H曲线) Nano-crystalline CT core's B-H data

H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)
0.26	30	3.92	1400	6.2	2800	7.85	4200
0.47	50	3.99	1450	6.25	2850	7.93	4250
0.89	100	4.09	1500	6.32	2900	8.01	4300
1.17	150	4.17	1550	6.37	2950	8.05	4350
1.38	200	4.27	1600	6.45	3000	8.13	4400
1.57	250	4.47	1650	6.52	3050	8.2	4450
1.7	300	4.47	1700	6.57	3100	8.25	4500
1.81	350	4.54	1750	6.65	3150	8.3	4550
1.91	400	4.62	1800	6.71	3200	8.35	4600
2.02	450	4.72	1850	6.77	3250	8.4	4650
2.19	500	4.79	1900	6.85	3300	8.48	4700
2.31	550	4.87	1950	6.91	3350	8.53	4750
2.41	600	4.94	2000	6.97	3400	8.58	4800
2.48	650	5.02	2050	7.02	3450	8.63	4850
2.58	700	5.09	2100	7.1	3500	8.7	4900
2.63	750	5.19	2150	7.15	3550	8.75	4950
2.71	800	5.29	2200	7.22	3600	8.8	5000
2.8	850	5.37	2250	7.27	3650	8.88	5050
2.9	900	5.44	2300	7.33	3700	8.95	5100
2.96	950	5.52	2350	7.38	3750	9	5150
3.04	1000	5.6	2400	7.43	3800	9.08	5200
3.14	1050	5.7	2450	7.48	3850	9.13	5250
3.24	1100	5.77	2500	7.55	3900	9.21	5300
3.36	1150	5.85	2550	7.61	3950	9.28	5350
3.46	1200	5.92	2600	7.65	4000	9.36	5400
3.59	1250	6.01	2650	7.71	4050	9.43	5450
3.72	1300	6.07	2700	7.75	4100	9.51	5500
3.82	1350	6.12	2750	7.81	4150	9.58	5550

纳米晶互感器铁芯磁化曲线数据表(B-H曲线) Nano-crystalline CT core's B-H data

H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)	H (mA/cm)	B (Gs)
9.63	5600	12.26	7000	16.55	8400	24.21	9800
9.68	5650	12.39	7050	16.73	8450	24.52	9850
9.76	5700	12.51	7100	16.93	8500	25.23	9900
9.83	5750	12.56	7150	17.18	8550	26.21	9950
9.93	5800	12.74	7200	17.43	8600	27.42	10000
10	5850	12.84	7250	17.68	8650	28.61	10050
10.08	5900	12.97	7300	17.9	8700	29.73	10100
10.16	5950	13.09	7350	18.15	8750	31.4	10150
10.26	6000	13.22	7400	18.33	8800	32.63	10200
10.36	6050	13.37	7450	18.58	8850	33.82	10250
10.43	6100	13.52	7500	18.83	8900	34.93	10300
10.53	6150	13.62	7550	19.06	8950	36.92	10350
10.61	6200	13.77	7600	19.36	9000	38.13	10400
10.71	6250	13.92	7650	19.61	9050	40.62	10450
10.76	6300	14.09	7700	19.88	9100	43.62	10500
10.83	6350	14.27	7750	20.16	9150	46.53	10550
10.93	6400	14.47	7800	20.46	9200	49.82	10600
11.01	6450	14.6	7850	20.76	9250	53.34	10650
11.13	6500	14.72	7900	21.06	9300	57.23	10700
11.24	6550	14.95	7950	21.39	9350	61.14	10750
11.36	6600	15.12	8000	21.59	9400	66.22	10800
11.49	6650	15.27	8050	21.99	9450	72.23	10850
11.59	6700	15.42	8100	22.29	9500	79.22	10900
11.69	6750	15.62	8150	22.62	9550	88.83	10950
11.79	6800	15.82	8200	22.82	9600	99.22	11000
11.89	6850	15.95	8250	23.09	9650		
12.01	6900	16.22	8300	23.44	9700		
12.16	6950	16.38	8350	23.72	9750		

精密微型电流互感器

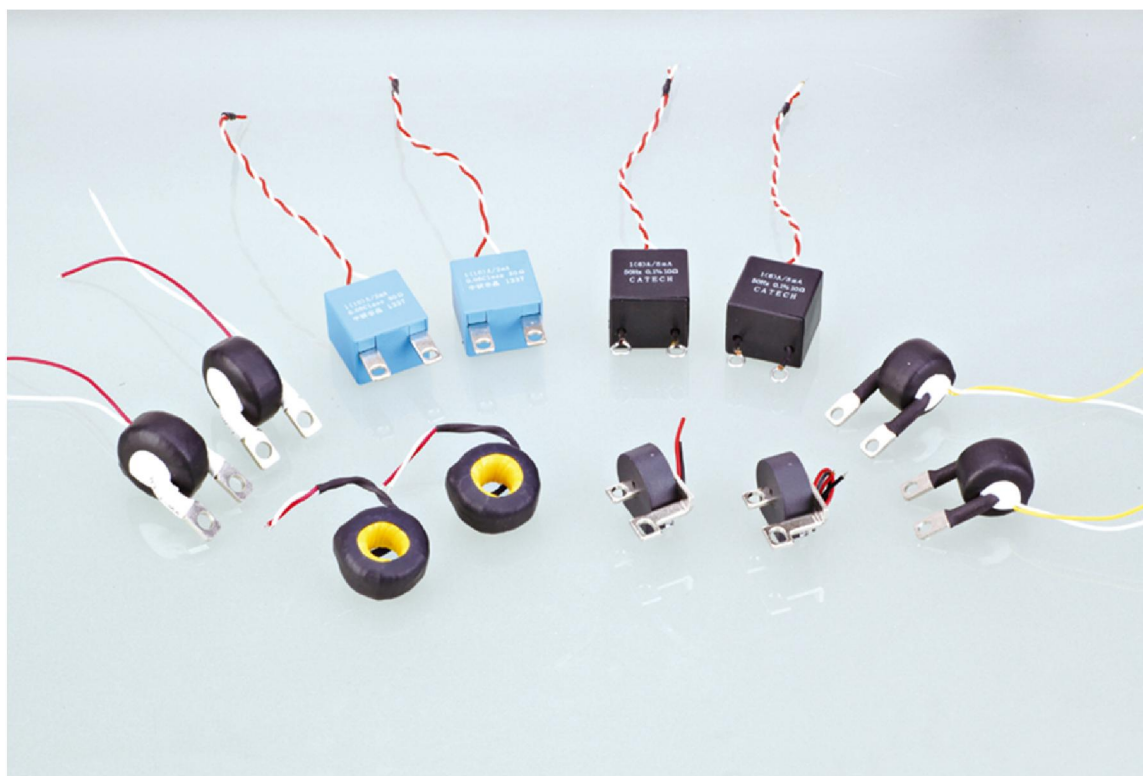
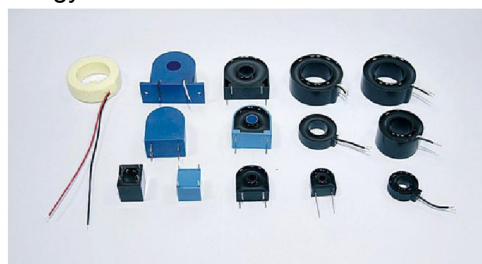
Nano-cystalline Mini-Precision Current Transformers

本公司微型电流互感器系列采用铁基纳米晶或铁基纳米晶与铁基非晶组合磁芯制作而成，它具有比传统的磁性材料更高的磁导率及耐直流谐波特性，磁芯经过我司的磁场处理使得互感器具有更高的线性度(俗称：恒导互感器)。

The miniature current transformer series using Fe-based nano-crystalline or Fe-based nano-crystalline and amorphous composite cores. It has a higher permeability than traditional magnetic materials and higher harmonic characteristics of DC magnetic field, better linear.

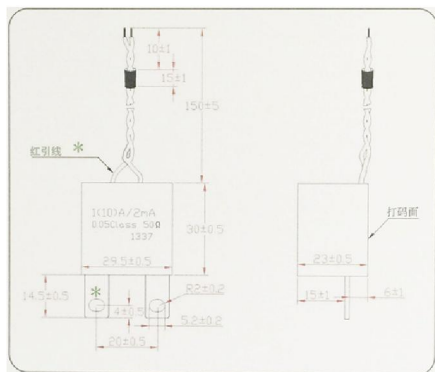
应用领域 Application

- 微型电流互感器系列 Nano-crystalline mini current transformers
- 电能计量用电流互感器 Current transformer for metering electric energy
- 继电器保护用电流互感器 Current transformer relay protection
- 零序(剩余)电流互感器 The zero sequence current transformer



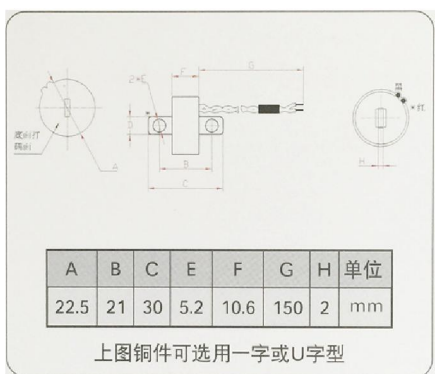
产品编码说明:	CA	04	XXXXX	XX
Code introduction:	日钢铁芯 NICORE	电流互感器 CT	同类别产品流水号 Serial number	同类别产品识别码 Heading code

典型产品性能 Characteristics



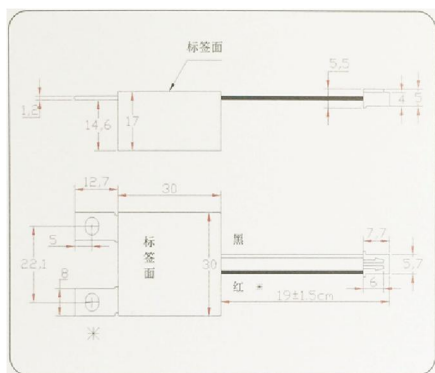
规格 Specification	1 (10) A / 2mA-50Ω	
产品编号 Part number	CA04-10001	单位 unit
变比 Ratio of transformation	5:2500	匝 turns
精度 Accuracy	0.05	级 Class
额定输入电路 Rated input current	1	A
额定输出电流 Rated output current	2	mA
最大输入电流 Maximum input current	10	A
额定相对相位误差 Rated relative phase error	<7	分
相对误差 Relative phase error	<5	分
0.05In绝对相位误差 Absolute phase error	<8	分
比差值 Contrast values (5%- Max%)	<0.05	%
隔离耐压 Isolation of pressure	3500V 漏电流小于1mA	V / min
使用频率 Frequency	40-60	Hz
负载电阻 Load resistance	50	Ω

说明: $\Delta\delta_i = \delta_i - \delta_e$ 。在电流 $20\%I_n - I_{max}$ 中间, 取最大相位差 δ_{max} 与最小相位差 δ_{min} 的平均值 δ_e , 测量点工作电流 i 下的相位差 δ_i 与平均值 δ_e 之差定义为测量点工作电流 i 相位差误差。

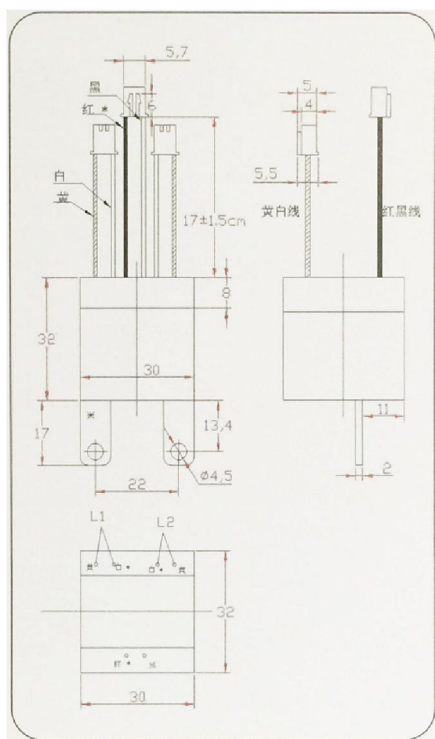


规格 Specification	5(60) A/2.5mA-10Ω 0.2Class		
产品编号 Part number	CA04-10004	CA04-10003	单位 unit
变比 Ratio of transformation	1:2000	1:1500	匝 turns
精度 Accuracy	0.2	0.2	级 Class
额定输入电流 Rated input current	5	6	A
额定输出电流 Rated output current	2.5	4	mA
最大输入电流 Maximum input current	60	60	A
额定相对相位误差 Rated relative phase error	<10	10	分
0.05In绝对相位误差 Absolute phase error	<20	<20	分
比差值 Contrast values (5%- Max%)	<0.2	<0.2	%
隔离耐压 Isolation of pressure	4000V 漏电流小于1mA	4000V 漏电流小于1mA	V / min
副边Q值 Vice side Q		>0.6 (50Hz 1V 内阻30Ω)	
使用频率 Frequency	40-60	40-60	Hz
负载电阻 Load resistance	10	10	Ω

典型产品性能 Characteristics

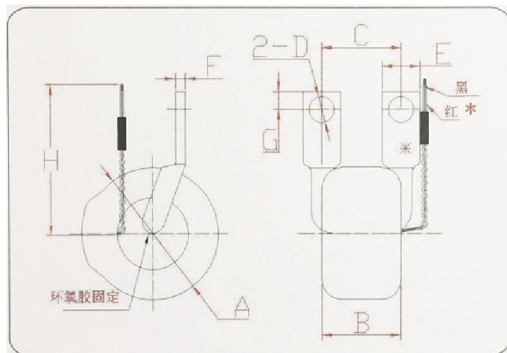


规格 Specification	1 (10) A / 2mA-20Ω 0.1Class	
产品编号 Part number	CA04-10015	单位 unit
变比 Ratio of transformation	5:2500	匝 turns
精度 Accuracy	0.1	级 Class
额定输入电路 Rated input current	1	A
额定输出电流 Rated output current	2	mA
最大输入电流 Maximum input current	10	A
额定相对相位误差 Rated relative phase error	<7	分
比差值 Contrast values (5%- Max%)	<0.1	%
隔离耐压 Isolation of pressure	3500V 漏电流小于1mA	V / min
使用频率 Frequency	40-60	Hz
负载电阻 Load resistance	20	Ω



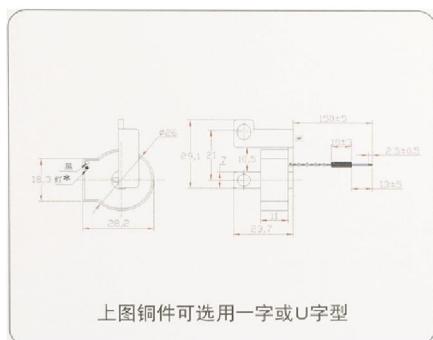
规格 Specification	5 (20) A / 2.5mA-20Ω 0.1Class	
产品编号 Part number	CA04-10016	单位 unit
变比Ratio of transformation	1:2000	匝 turns
精度 Accuracy	0.1	级 Class
额定输入电流Rated input current	5	A
额定输出电流Rated output current	2.5	mA
最大输入电流Maximum input current	10	A
额定相对相位误差 Rated relative phase error	<8	分
比差值Contrast values(5%- Max%)	<0.1	%
L1及L2电感量 L1&L2 inductance	10kHz 0.3V	1-1.4mH
隔离耐压Isolation of pressure	3500V 漏电流小于1mA	V / min
使用频率 Frequency	40-60	Hz
负载电阻 Load resistance	20	Ω

典型产品性能 Characteristics



编号	A	B	C	E	F	G	H	单位
CA04-10024	32	20	20	9.5	2.5	6.2	150	mm
CA04-10023	34	<20	20	9.5	2.5	6.2	150	
CA04-10020	33	<20	20	9.5	2.5	6.2	150	

规格 Specification	1 (80) A/0.4mA-10Ω 0.1Class	5 (100) A/2mA-10Ω 0.1Class	5 (60) A/2mA-10Ω 0.1Class	
产品编号 Part number	CA04-10024	CA04-10023	CA04-10020	单位 unit
变比 Ratio of transformation	1:2500			匝 turns
精度 Accuracy	0.1			级 Class
额定输入电路 Rated input current	5			A
额定输出电流 Rated output current	2			mA
最大输入电流 Maximum input current	80、60、100			A
额定相对相位误差 Rated relative phase error	10			分
0.05In绝对相位误差 Absolute phase error	<15			分
比差值 Contrast values (5%- Max%)	<0.1			%
隔离耐压 Isolation of pressure	3500V 漏电流小于1mA			V / min
使用频率 Frequency	40-60			Hz
负载电阻 Load resistance	10			Ω
额定直流误差 Rated De error	< 3%			



规格 Specification	10 (60) A / 5mA-10Ω 0.2Class	
产品编号 Part number	CA04-10026	单位 unit
变比 Ratio of transformation	1:2000	匝 turns
精度 Accuracy	0.1	级 Class
额定输入电流 Rated input current	10	A
额定输出电流 Rated output current	5	mA
最大输入电流 Maximum input current	60	A
额定相对相位误差 Rated relative phase error	10	分
相对误差 Relative error	<20	分
比差值 Contrast values (5%- Max%)	<0.2	%
隔离耐压 Isolation of pressure	4000V 漏电流小于1mA	V / min
使用频率 Frequency	40-60	Hz
负载电阻 Load resistance	10	Ω

铁基非晶滤波电感铁芯

Iron-based Amorphous Inductor Filter Cores

铁基非晶滤波电感铁芯具有优良的频率特性和交直流叠加特性以及低的铁芯损耗，同时，其磁导率可控制变化在很宽的范围内(μ 由120至1200)，可耐不同范围的偏流安匝数(偏磁场)，适合于各种高频、交直流叠加场合的电感器应用，其性价比优于铁镍和铁硅铝磁粉芯。

Fe-based amorphous inductor filter cores show good frequency property, high stable inductance with various DC bias current, and low core loss, wide permeability range from 120 to 1200. Good choice for the usage of inductor, choke, filters etc with high frequency and DC AC subsistent situation with better price property comparison ratio than FeNiMo, FeNi and FeSiAl powder cores.



应用领域 Application

- 汽车音响用扼流圈 Car audio choke coils
- PFC 校正电感 PFC corrector inductors
- 差模滤波器及平滑输出滤波器 DMC filters and smooth output filters
- DC/DC转换器滤波线圈 DC/DC transformer filters
- 常规滤波线圈及适配器滤波线圈 Normal usage and adapter filters

性能特点 Characteristics

- 高饱和磁感、低矫顽力、低损耗； High saturation flux density BS, low Hc, low loss;
- 优良的抗直流偏置特性； Excellent anti-DC bias property;
- 高磁导率120到1200，绕线圈数少。 High permeability of 120 to 1200, less wire winding turns.

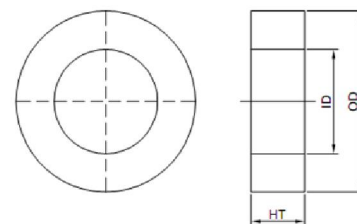
性能指标 Performance Index

项目 Item	指标 Performance	项目 Item	指标 Performance
饱和磁感应强度 Saturation flux density Bs(T)	1.56	硬度 Hardness Hv	960
居里温度 Curie temperature Tc (°C)	400	密度 Density ρ (g/cm ³)	7.18
晶化温度 Crystalline temperature Tx(°C)	515	电阻率 Resistivity δ ($\mu\Omega\cdot\text{cm}$)	130
饱和磁滞伸缩系数 Magnetostriction (λ_s)	27×10^{-6}	---	---

与常用磁芯的性能对比 Properties comparison with common used cores

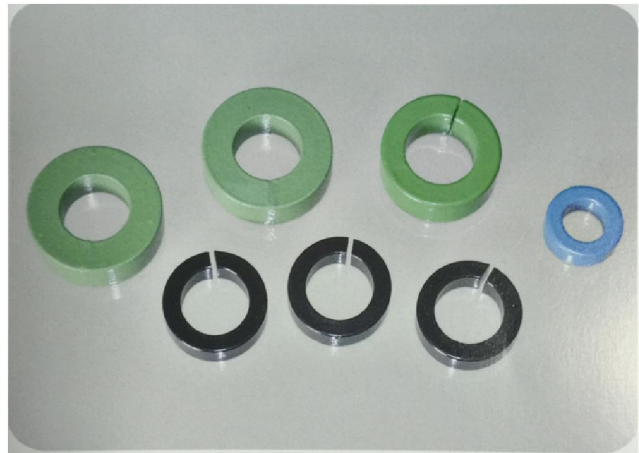
项目 Item	AM (250 μ)	MPP (200/300 μ)	AM (550 μ)	MPP (550 μ)	AM (1500 μ)	Ferrite (1500 μ)
饱和磁感应强度 Saturation flux density Bs(T)	1.54	0.75	1.54	0.75	1.54	0.45
相对初始磁导率 Initial permeability (μ_0)	250	200/300	550	550	1500	1500
铁芯损耗 Core loss (W/Kg) (300mT/5kHz)	17	20	10	55	4	9
铁芯损耗 Core loss (W/Kg) (100mT/20kHz)	11	16	6	40	1.2	2
铁芯损耗 Core loss (W/Kg) (50mT/100kHz)	13	45	9	115	4	2
铁芯损耗 Core loss (W/Kg) (500mT/200kHz)	31	150	28	313	12	7
居里温度 Curie temperature Tc (°C)	410	460	410	460	410	460
电阻率 Resistivity δ ($\mu\Omega\cdot\text{cm}$)	1.3	$\sim 10^4$	1.3	$\sim 10^4$	1.3	$\sim 10^4$
密度 Density ρ (g/cm ³)	7.18	8.7	7.3	8.7	7.3	4.8
叠片系数 Stacking factor	0.86	---	0.86	---	0.86	---

产品规格 Specification



产品编码说明:	AC	PFC	00001	w
Code introduction:	非晶电感铁芯 Amorphous core	功率校正电感铁芯 Power factor correction core	规格序号 Specification No	护盒颜色,w白色,b黑色,c喷涂 Case color: w(hite), b(lack),c(oated)

产品牌号 Part No.	铁芯尺寸 Core size (mm)			护盒尺寸 Case size (mm)			额定 电流 Rated I	匝 数 turn	0A下电感 L@0A	0A下最小单 匝电感 Almin.@0A	额定电流电感 量 L@rated I	额定电流下最小 单匝电感量 Almin.@rated I
	OD	ID	HT	OD	ID	HT	(A)	(N)	(μ H)	Min. (nH/N^2)	(μ H)	Min. (nH/N^2)
AC-0022-w	15	9	5	17	7.6	7.1	1.0	20	200 +50% - 20%	400.0	≥ 150	375
AC-0005-w	16	10	8	18	8.6	11	0.5	30	≥ 550	611.0	≥ 500	556
AC-0079-w	18	11	10	20	9.3	12	1.0	20	200 +50% - 20%	400.0	≥ 150	375
AC-0008-w	18	11	10	21	9.3	12	1.0	27	≥ 400	548.0	≥ 350	480
AC-0085-w	18	11	8	20	9.3	9.6	1.0	24	450 $\pm$ 20%	625.0	≥ 330	573
AC-0086-w	18	11	8	20	9.3	9.6	1.0	21	≥ 320	725.0	≥ 250	567
AC-0088-w	18	10	10	20	8.5	13	1.0	26	565 $\pm$ 25%	626.0	≥ 400	591
AC-0009-w	20	12	10	22	9.9	12	1.8	28	755 $\pm$ 25%	770.0	≥ 300	382
AC-0015-w	15.8	9.5	8	18	8	11	18.0	8	10 $\pm$ 20%	130.0	≥ 5	80
AC-0020-w	22	13	10	26	9.5	14	35.0	5	3.2 $\pm$ 20%	150.0	≥ 1.8	72
AC-0021-b	18.7	11	6	21.5	8	8	8.0	41	105 $\pm$ 20%	65.0	≥ 72	45
AC-0002-b	19	10	5	20.3	9	5.75	1.0	30	600 $\pm$ 20%	450.0	≥ 325	360
AC-0001-c	18	10	5	19.5	9	5.8	1.0	30	450 $\pm$ 20%	500.0	≥ 300	330
AC-0094-c	58	38	25	59.5	39	26.5	20.0	1	4 $\pm$ 20%	4000.0	≥ 3	3000

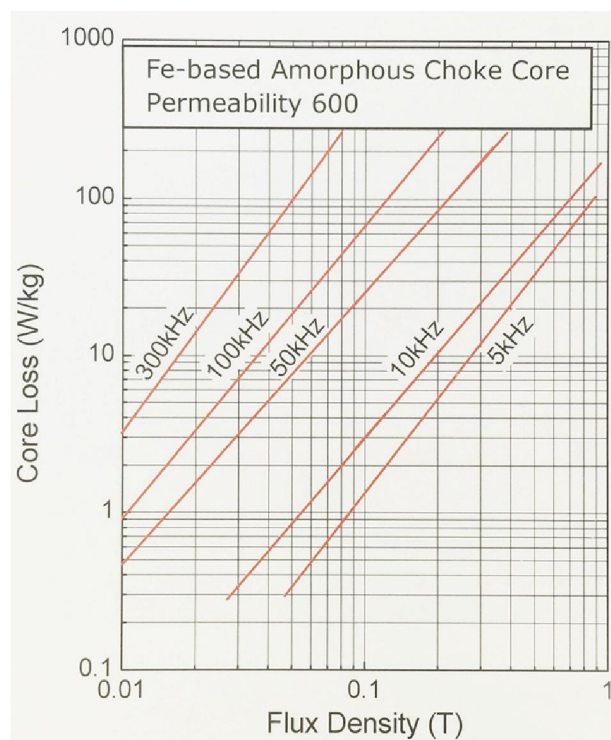
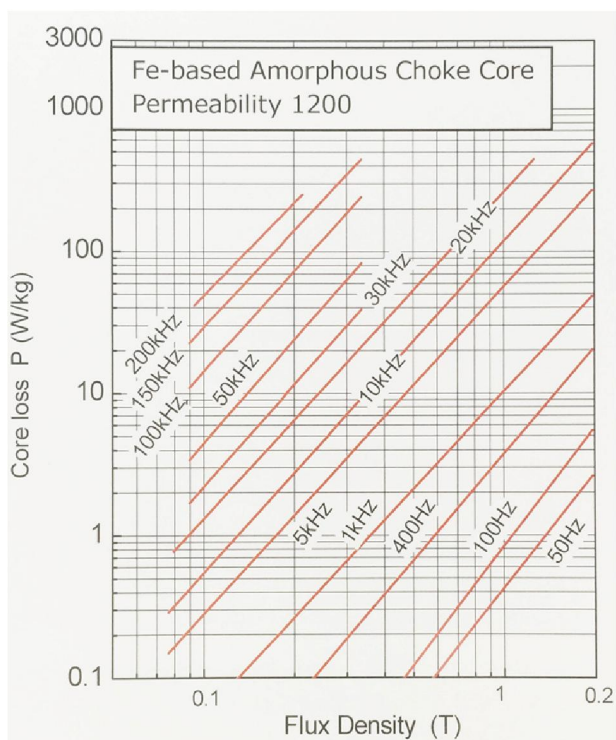
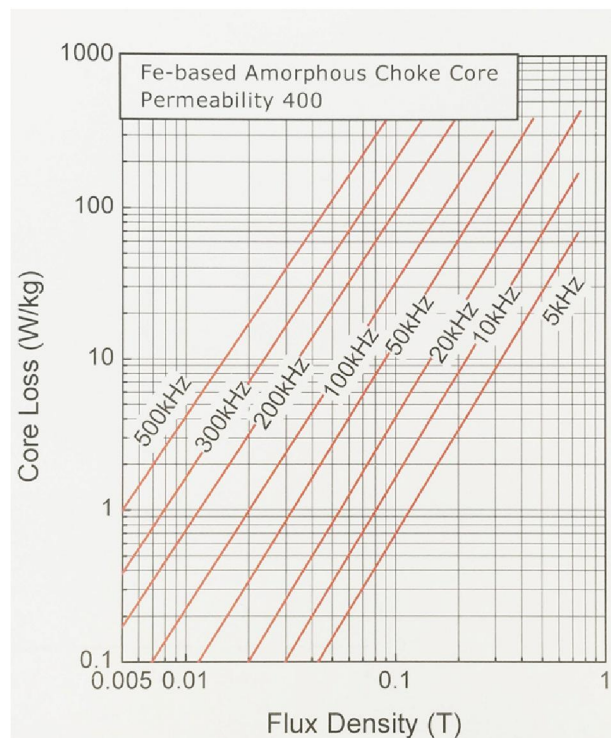
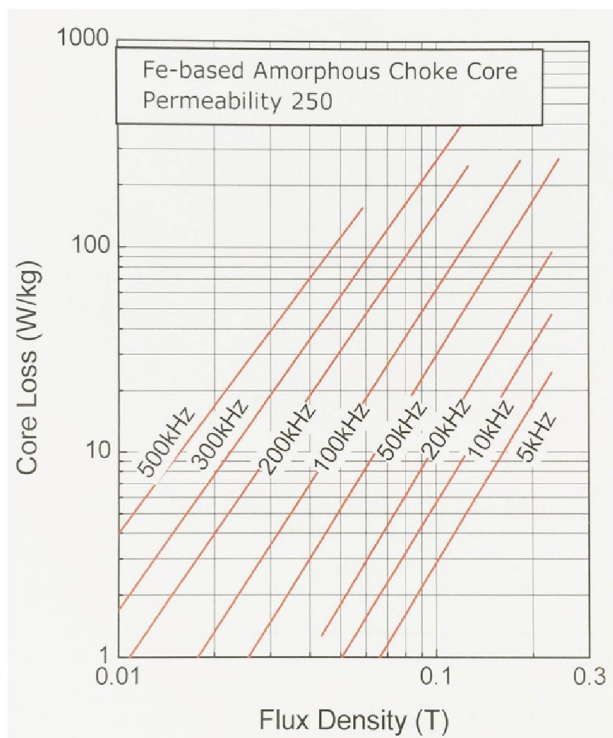


产品牌号 Part No.	铁芯尺寸 Core size (mm)			护盒尺寸 Case size (mm)			磁路长度 Flux path length	截面积 Cross area	窗口面积 Window Area	体积 Volume	面积积 Wa x Ae	磁导率 Permea- bility	单匝 电感 AL
	OD	ID	HT	OD	ID	HT	Le(mm)	Ae(cm ²)	Wa(cm ²)	Vol(cm ³)	(cm ⁴)	(μ)	(nH/N ²)
PFC-0016-c	15	10	5	18	8	7	3.93	0.11	0.50	0.43	0.06	100	34.4
PFC-0011	18	11	10	21	9	13	4.55	0.31	0.64	1.41	0.20	100	83
PFC-0054	25	15	10	30	11	13	6.28	0.43	0.95	2.70	0.41	100	86
PFC-0009	26	16	10	29	13	13	6.59	0.43	1.33	2.83	0.57	100	47.2
PFC-0030	30	20	15	34	17	19	7.85	0.65	2.27	5.10	1.48	100	103
PFC-0027	40	25	10	45	21	13	10.20	0.64	3.46	6.53	2.21	100	79.3
PFC-0019	40	25	15	45	21	19	10.21	0.97	3.46	9.90	3.36	100	119
PFC-0005	40	25	20	45	21	25	10.36	2.06	3.46	21.34	7.13	100	159
PFC-0043	46	27	20	51	23	25	11.46	3.26	4.15	37.36	13.53	100	358
PFC-0020	50	32	15	55	28	19	12.87	1.16	6.15	14.93	7.13	100	113
PFC-0003	50	32	20	55	28	25	12.87	1.55	6.15	19.95	9.53	100	151
PFC-0021	64	40	15	69	36	19	15.70	1.29	10.17	20.25	13.12	100	103
PFC-0061	70	40	25	75	36	30	17.27	3.23	10.17	55.78	32.85	100	235
PFC-0004	80	50	25	86	46	30	20.41	3.23	16.61	65.92	51.36	100	199
PFC-0002-b-03	80	50	40	85	46	45	20.41	5.16	16.61	105.32	89.47	100	318
PFC-0017-b-02	100	60	20	105	55	25	25.12	3.44	23.75	86.41	84.69	100	172
PFC-0039-b-03	100	60	40	105	55	45	25.12	6.88	23.75	172.83	163.40	100	344

注：可根据客户要求，设计制作其他规格磁芯尺寸和性能。

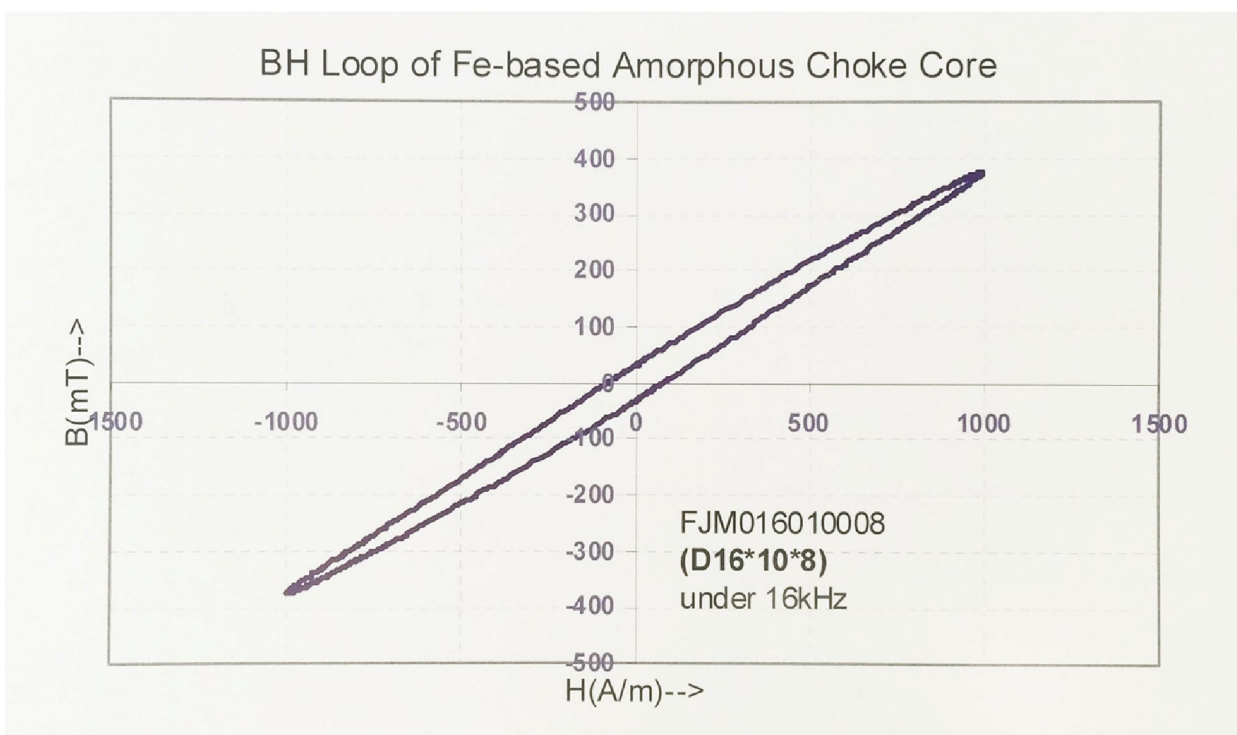
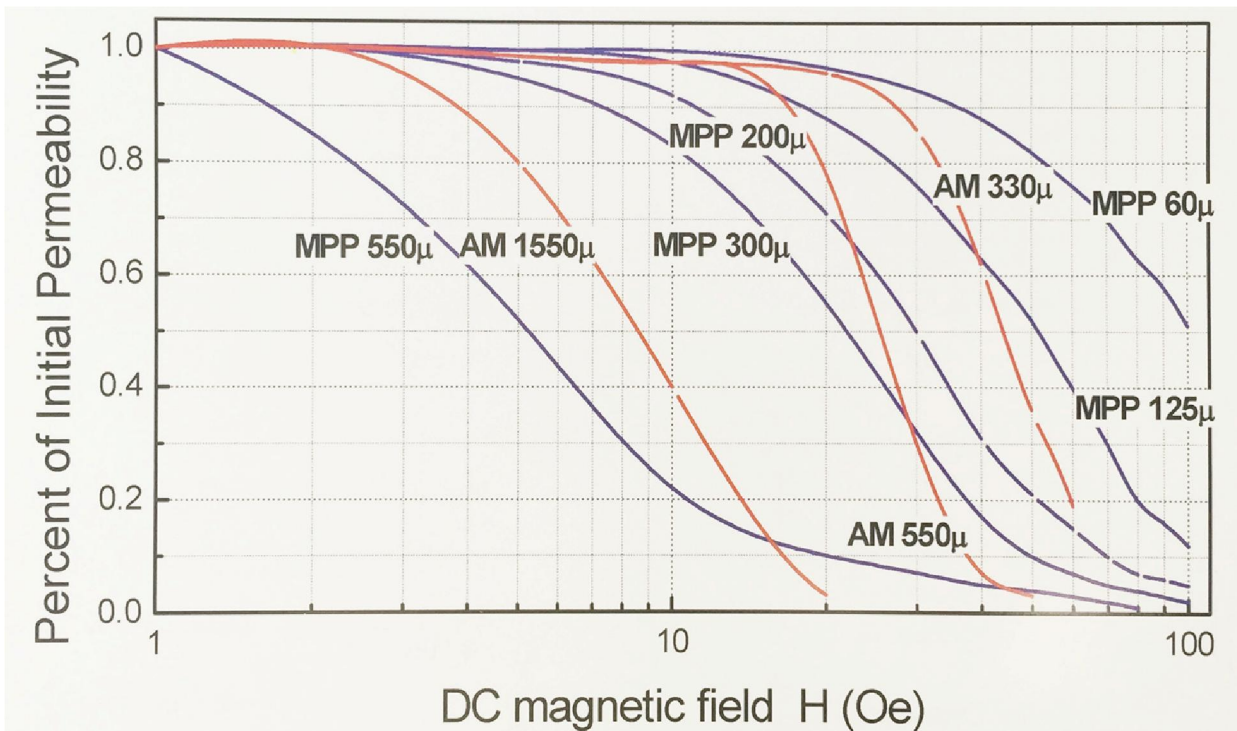
Note: Other sizes and specifications are also available according to customer's requirement.

损耗曲线 Core Loss Curve



磁滞回线及磁导率随直流的变化曲线 BH Loop and Permeability Curves

Permeability versus DC Bias Curves of MPP and Fe-based Amorphous Choke cores



电感系数随直流电流的变化曲线 AL vs. NI Curves

