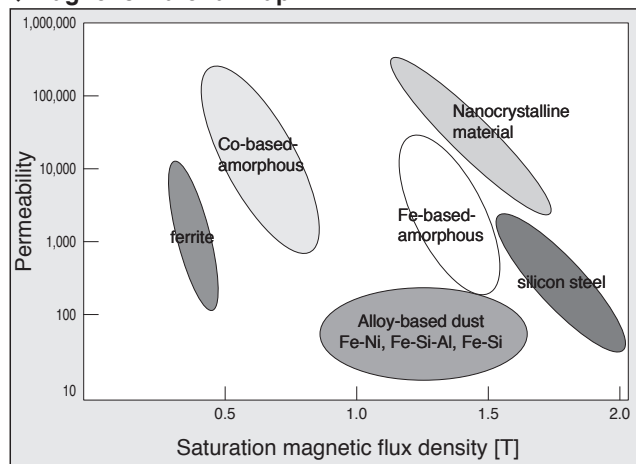


CHOKE COIL CHARACTERISTICS

◆ Characteristics comparison of magnetic materials

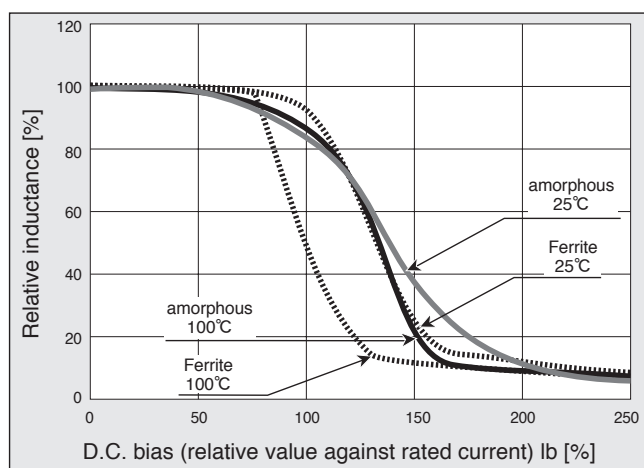
Application	Material shape	Product name	Composition	Saturation magnetic flux density Bs [mT]	Magnetic permeability $\mu(100\text{kHz})$	Curie point Tc [°C]	Frequency Characteristics (Reference) [kHz]
Power system	Foil strip	Amorphous	Fe-Si-B	1.56	- 5,000	415	- 150
			Co-Fe-Ni-Si-B	0.6	- 18,000	180	-
		Silicon steel plate	Fe-Si	1.3	- 800	700	- 20
	Powder	Alloy dust	Fe-Ni (High Flux)	1.5	26 to 200	420	- 300
			Fe-Si-Al (Sendust)	1.1	26 to 200	570	- 150
			Fe-Si (Mega flux)	1.6	26 to 200	500	- 50
			Fe-Si-B (Amorphous dust)	1.56	60 to 200	415	- 300
			Mn-Zn	0.4	- 2,400	250	- 500
		ferrite	Ni-Zn	0.3	10 to 500	350	- 1,000
			Fe	1.0	75	770	- 20
Normal	Powder	Fe dust	Fe	1.0	75	770	- 20
Common	Foil strip	Nanocrystalline	Fe-Si-Br-Nb-Cu	1.23	15,000 to 31,000	570	- 1,000
	Powder	ferrite	Mn-Zn	0.5	5,000 to 16,000	130	- 1,000

◆ Magnetic material map



◆ D.C. bias of amorphous choke coil

● Temperature dependence : Core temperature 25, 100°C



◆ D.C. bias of normal mode choke coil

