

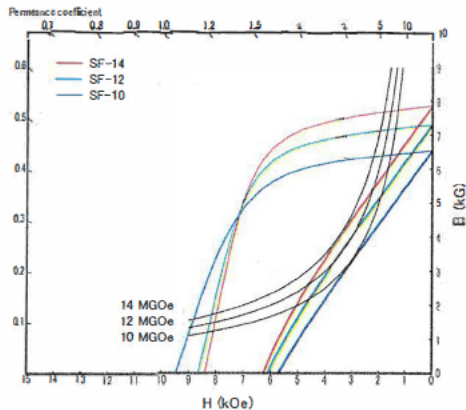
SmFeN Bonded Magnet

Magnetic Properties

Item		SF-10	SF-12	SF-14
Residual Induction	mT	630~650	700~750	760~810
	(kG)	(6.3~6.5)	(7.0~7.5)	(7.6~8.1)
Coercive Force	HcB	435~485	460~510	485~535
	(kA/m)	(5.5~6.1)	(5.8~6.4)	(6.1~6.7)
	HcJ	715~805	690~780	660~755
	(kOe)	(9.0~10.1)	(8.7~9.8)	(8.3~9.5)
Maximum Energy Product	kJ/m^3	76~84	92~99	107~115
	(MGOe)	(9.5~10.5)	(11.5~12.5)	(13.5~14.5)
Saturation Magnetizing Force	kA/m	≥ 2000	≥ 2000	≥ 2000
	(kOe)	(≥ 25)	(≥ 25)	(≥ 25)
Recoil Permeability	μ_{rec}	1.1	1.1	1.1
Temp. Coefficient of Br	%/K	-0.07	-0.07	-0.07
Temp. Coefficient of HcJ	%/K	-0.50	-0.50	-0.50
Density	Mg/m^3	4.1~4.3	4.4~4.6	4.7~4.9
Molding Method		Injection	Injection	Injection

The above figures are subject to change depending on magnet shape , dimension and magnetic orientation.

Demagnetization Curves



Physical and Mechanical Properties

Item		Properties
Tensile Strength	MPa	34.8
Flexural Strength	MPa	50.7
Modulus of Elasticity	MPa	10400
Linear Thermal Expansion Coefficient		5.85×10^{-5}
Electric Resistivity	$\Omega \cdot \text{m}$	0.015