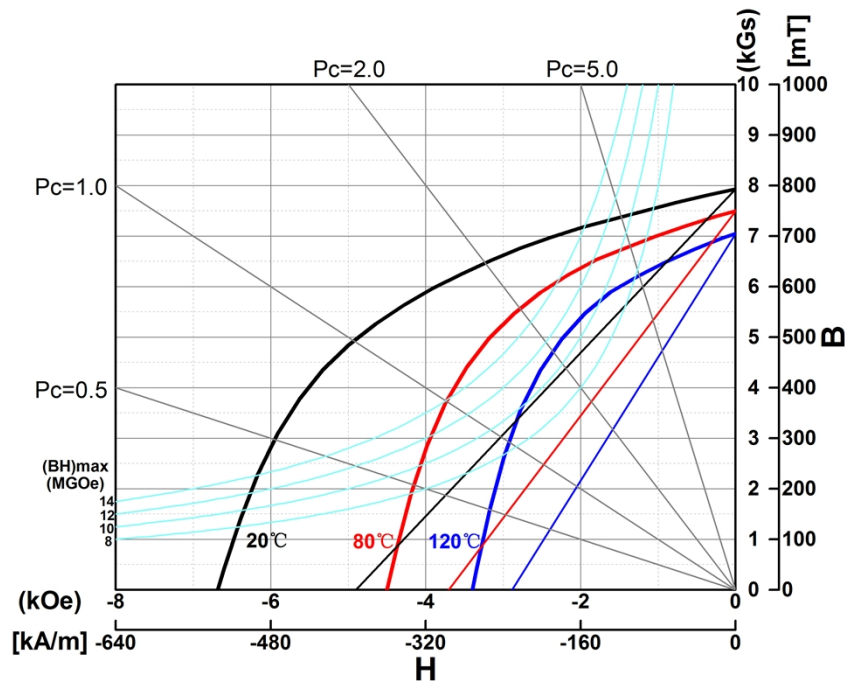


Material Datasheet of BNP-13L

Demagnetization Curve



Magnetic Properties

Residual Induction B_r	[mT] (kG)	780~830 7.8~8.3	Tem. Coeff. of H_{cj} $\alpha(H_{cj})$	[%/K]	-0.50
Coercivity H_{cB}	[kA/m] (kOe)	400~480 5.0~6.0	Recoil Permeability μ_{rec}		1.20
Intrinsic Coercivity H_{cJ}	[kA/m] (kOe)	480~640 6.0~8.0	Curie. Tem T_c	°C	320
Max. Energy Product $(BH)_{max}$	[kJ/m ³] (MGOe)	68.0~104.0 11.0~13.0	Max. Operating Tem. T_w	°C	120
Tem. Coeff. of Br $\alpha(B_r)$	[%/K]	-0.12			

Physical Properties

Density (ρ)	g/cm ³	6.1~6.4
Vickers Hardness	HV	350~380
Modulus of Elasticity	kN/mm ²	700~1000
Compressive Strength	N/mm ²	80~120
Expansion Coeff.	10 ⁻⁶ /K	10~30
Spec. Elec. Resistance	10 ⁻⁶ $\Omega \cdot m$	1~3
Thermal Conductivity	W/m-K	2

*: []: in the unit of SI

(): in the unit of CGS

The specification of the test sample is $\phi 10 \times 10$ column.

These values may vary depending on the magnet's shape and dimensions. It is recommended that the figures be verified in actual products