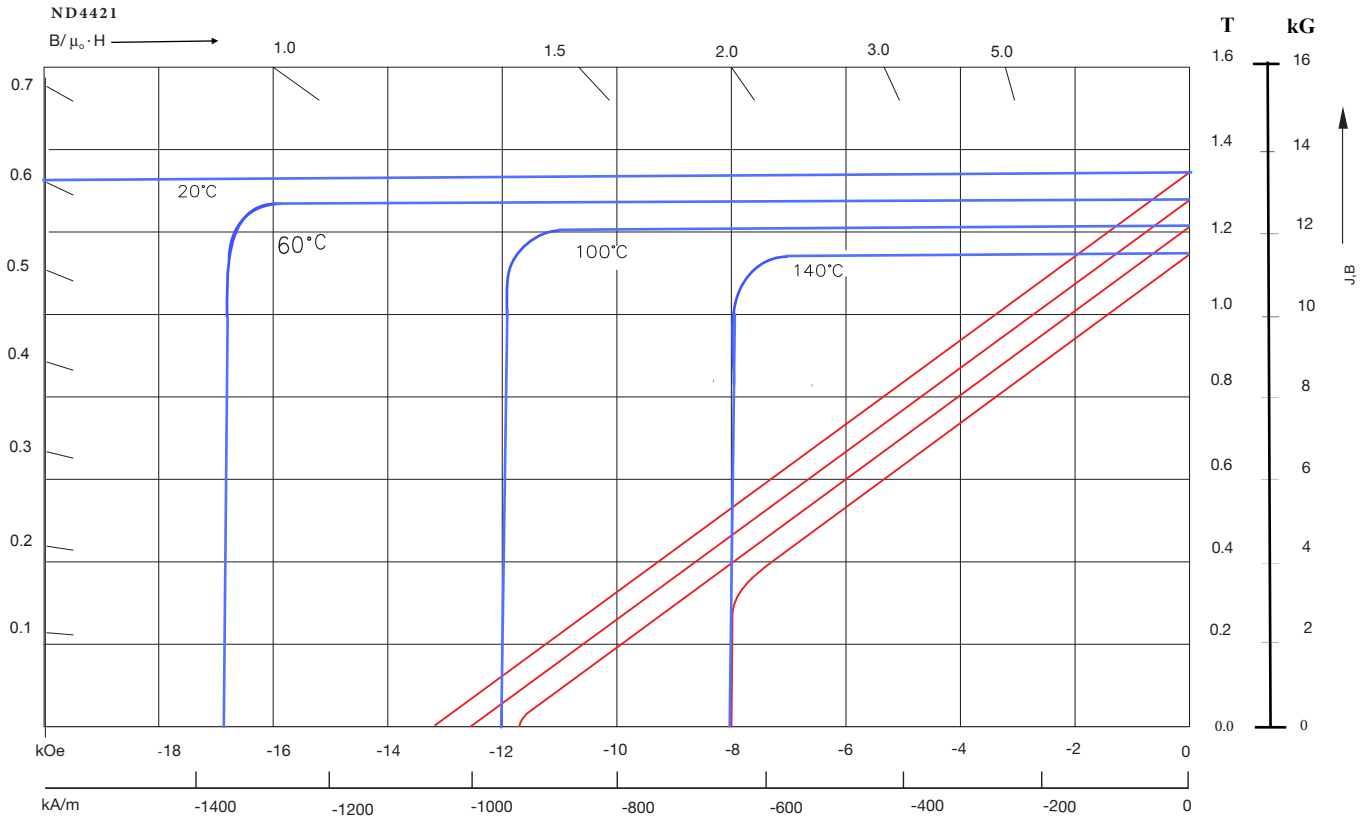


TDA MAGNETICS

Neodymium (Sintered) Grade ND4421

Demagnetization Curves



Magnetic Properties		Units	min.	nominal
Br, Residual Induction		Gauss	13,000	13,300
		Tesla	1.3	1.33
H _c , Coercivity		Oersteds	12,300	12,600
		kA/m	978.8	1002.7
H _{ci} , Intrinsic Coercivity		Oersteds	21,000	22,000
		kA/m	1671.1	1750.7
BH _{max} , Maximum Energy Product		MGOe	41.0	44.0
		kJ/m ³	326.3	350.1
Physical Properties		Units	C //	C ⊥
Reversible Temperature Coefficients ⁽¹⁾				
of Induction, α(Br)		%/°C		-0.11
of Coercivity, α(H _{ci})		%/°C		-0.51
Coefficient of Thermal Expansion ⁽²⁾		ΔL/L per °C×10 ⁻⁶	65.0	-5.0
Thermal Conductivity		W/(m·K)	5-15	
Specific Heat ⁽³⁾		J/(kg·K)		
Max. Recommended Use Temperature		°C	150	
Curie Temperature, T _c		°C	310	
Flexural Strength		psi	N/A	
		MPa	N/A	
Compressive Strength		psi	600-1250	
		MPa	160.0	
Young's Modulus		GPa	23.0	
Density		g/cm ³	7.6	
Hardness, Vickers		Hv	600	
Electrical Resistivity, ρ		Ω · cmμ	144	

(1) Coefficients measured between 20 and 200 °C

(2) Between 20 and 200 °C

(3) Between 20 and 150 °C