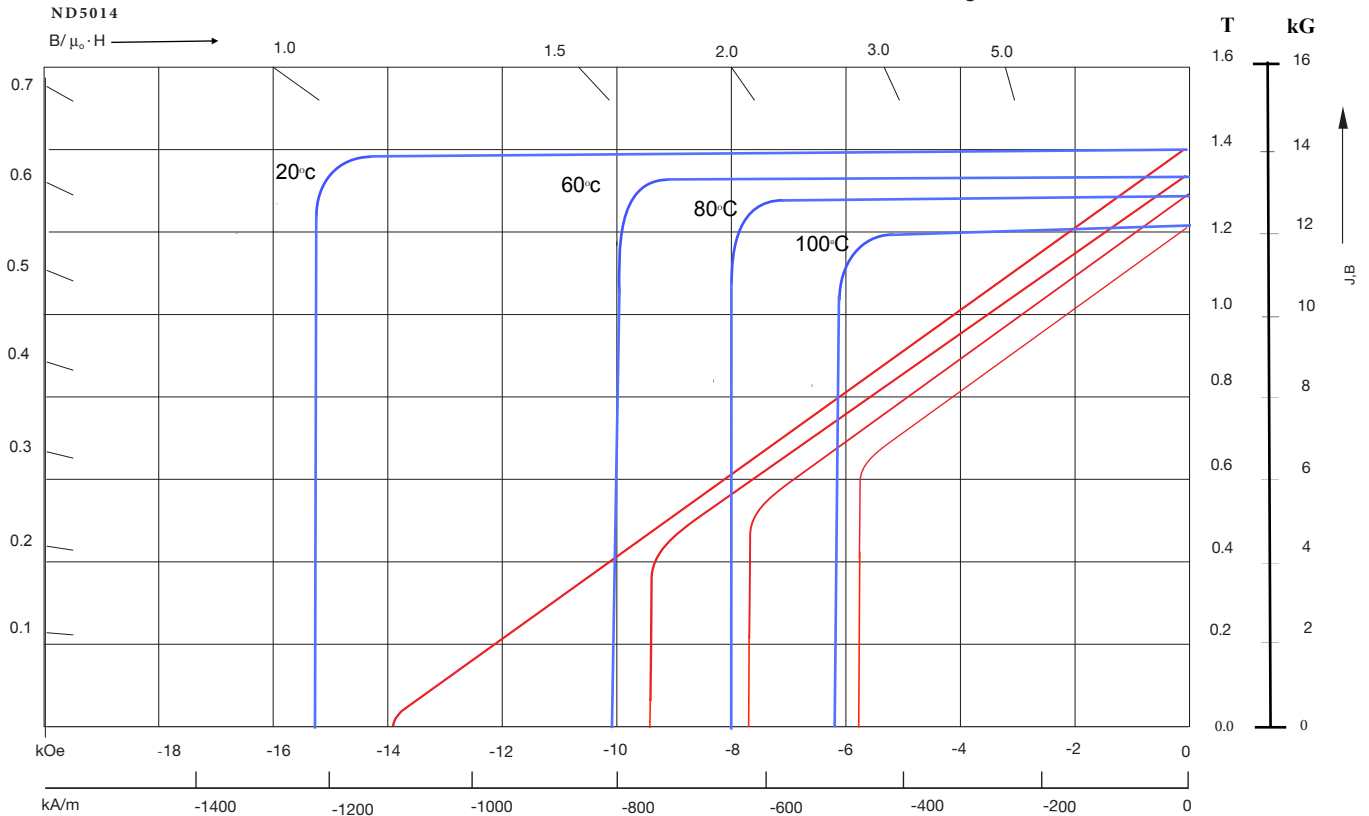


# TDA MAGNETICS

## Neodymium (Sintered) Grade ND5014

Demagnetization Curves



Magnetic Properties		Units	min.	nominal
Br, Residual Induction		Gauss	13,900	14,200
		Tesla	1.39	1.42
Hc, Coercivity		Oersteds	13,200	13,600
		kA/m	1050.4	1082.3
Hci, Intrinsic Coercivity		Oersteds	14,000	15,000
		kA/m	1114.1	1193.7
BHmax, Maximum Energy Product		MGOe	47.0	50.0
		kJ/m <sup>3</sup>	374	397.9
Physical Properties		Units	C //	C ⊥
Reversible Temperature Coefficients (1)				
of Induction, α(Br)		%/°C		-0.11
of Coercivity, α(Hci)		%/°C		-0.51
Coefficient of Thermal Expansion (2)		ΔL/L per °Cx10 <sup>-6</sup>	65.0	-5.0
Thermal Conductivity		W/(m·K)	5-15	
Specific Heat (3)		J/(kg·K)		
Max. Recommended Use Temperature		°C	100	
Curie Temperature, Tc		°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 <sup>3</sup>	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