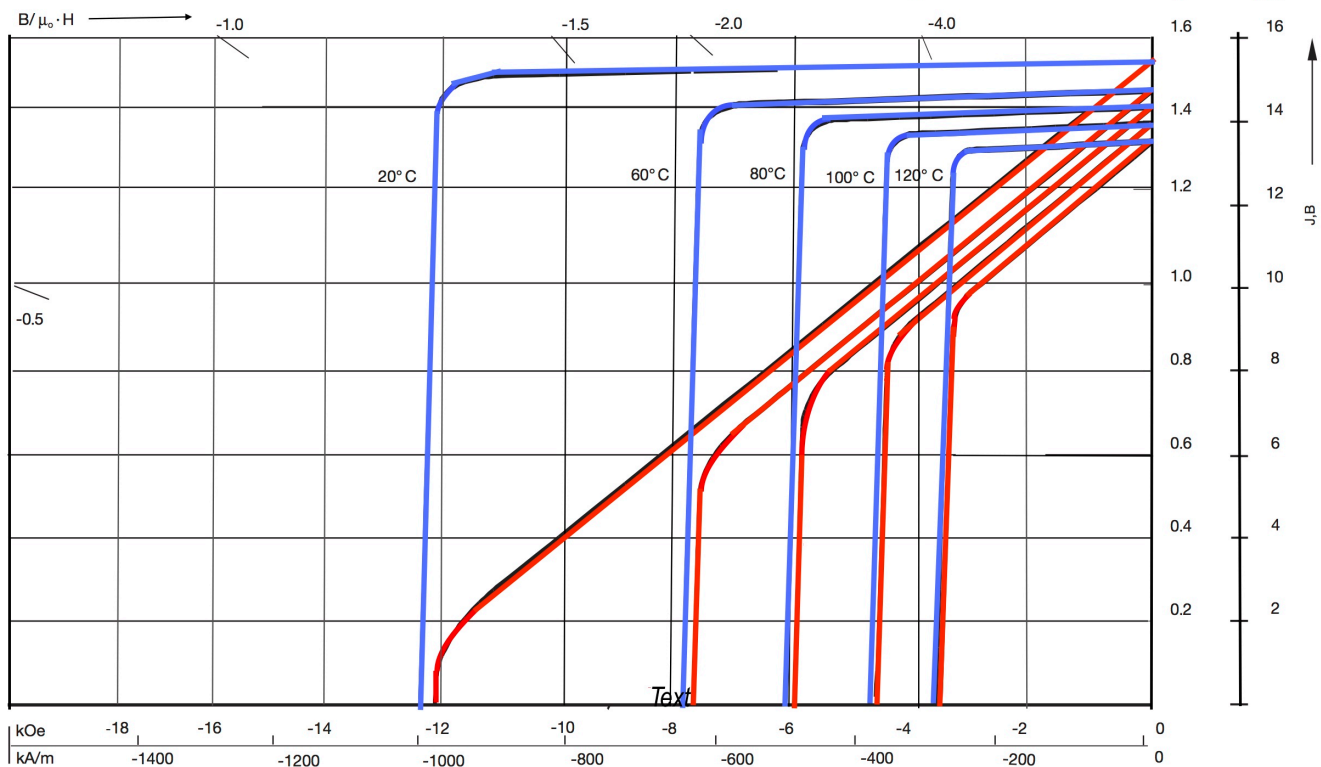


TDA MAGNETICS

Neodymium (Sintered) Grade ND5211

ND5211

Demagnetization Curves



Magnetic Properties		Units	min.	nominal
Br, Residual Induction		Gauss	14,200	14,400
		Tesla	1.42	1.44
Hc, Coercivity		Oersteds	10,500	11,500
		kA/m	836	915.1
Hci, Intrinsic Coercivity		Oersteds	11,000	12,000
		kA/m	876	954.9
BHmax, Maximum Energy Product		MGOe	49	53
		kJ/m ³	390	422
Physical Properties		Units	C //	C ⊥
Reversible Temperature Coefficients (1)				
of Induction, α(Br)		%/°C		-0.115
of Coercivity, α(Hci)		%/°C		-0.77
Coefficient of Thermal Expansion (2)		ΔL/L per °C×10 ⁻⁶	4.9	-2-0
Thermal Conductivity		W/(m·K)		5-15
Specific Heat (3)		J/(kg·K)		300-500
Max. Recommended Use Temperature		°C		180
Curie Temperature, Tc		°C		300-370
Flexural Strength		psi		N/A
		MPa		N/A
Compressive Strength		psi		N/A
		MPa		600-1250
Young's Modulus		GPa		140-170
Density		g/cm ³		7.6
Hardness, Vickers		Hv		500-700
Electrical Resistivity, ρ		Ω · cmμ	1.4-1.6(//C)*	1.2-1.4(⊥C)*

(1) Coefficients measured between 20 and 200 °C

(2) Between 20 and 200 °C

(3) Between 20 and 150 °C