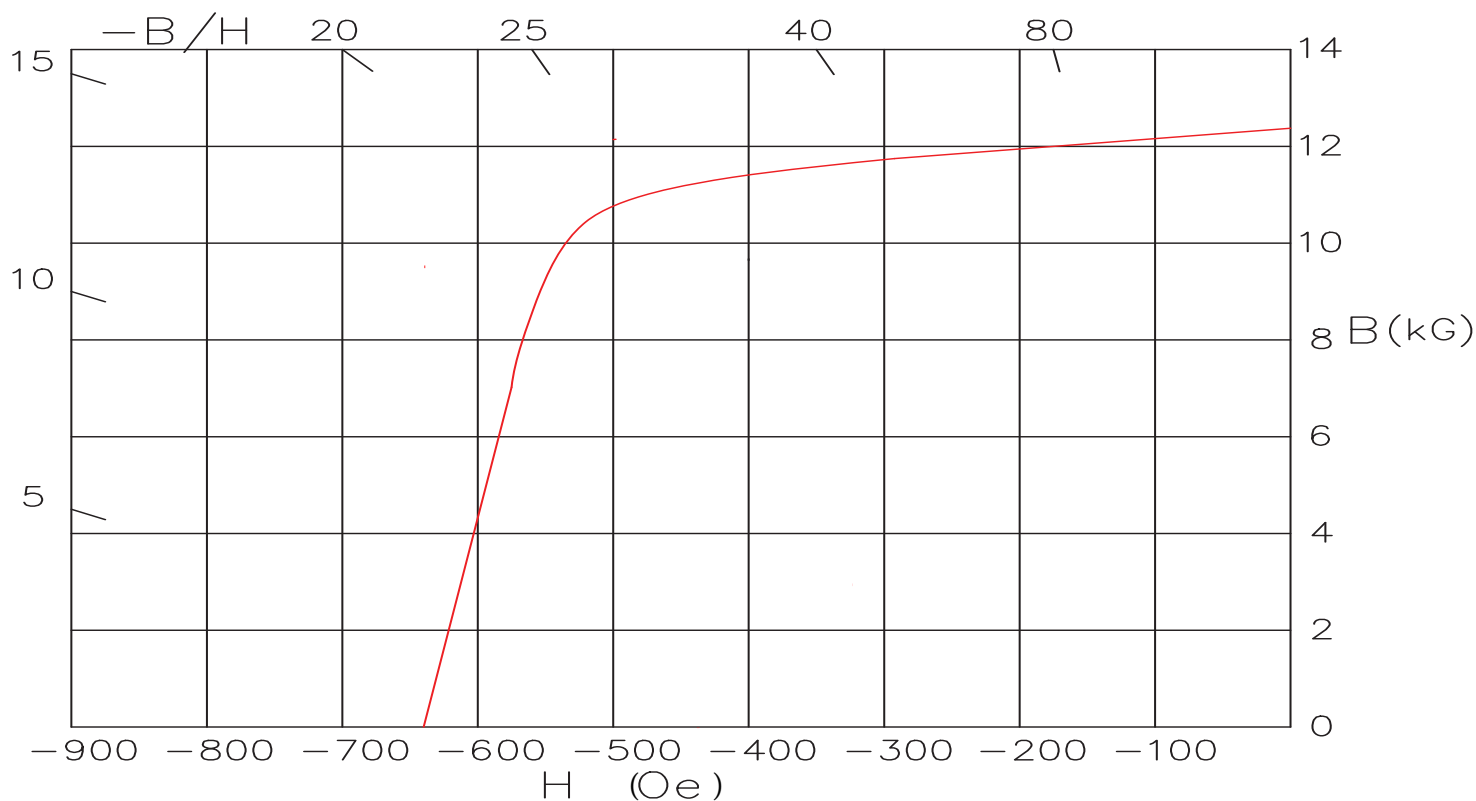


TDA MAGNETICS

Alnico (Cast) Grade AL0501



Magnetic Properties		Units	min.	nominal
Br, Residual Induction	Gauss		12,000	12,200
	Tesla		1.2	1.22
Hc, Coercivity	Oersteds		590	600
	kA/m		47	47.7
Hci, Intrinsic Coercivity	Oersteds		630	650
	kA/m		50.1	51.7
BHmax, Maximum Energy Product	MGOe		4.5	5.0
	kJ/m ³		31.8	39.8
Physical Properties		Units	C //	C ⊥
Reversible Temperature Coefficients ⁽¹⁾				
of Induction, α(Br)		%/°C		-0.01
of Coercivity, α(Hci)		%/°C		N/A
Coefficient of Thermal Expansion ⁽²⁾		ΔL/L per °C x 10 ⁻⁶	N/A	11.6
Thermal Conductivity		W/(m·K)		N/A
Specific Heat ⁽³⁾		J/(kg·K)		N/A
Max. Recommended Use Temperature		°C		525
Curie Temperature, Tc		°C		860
Flexural Strength	psi			90
	MPa			N/A
Compressive Strength	psi			2.0
	MPa			N/A
Young's Modulus		GPa		25.0
Density		g/cm ³		.264
Hardness, Vickers		Hv		N/A
Electrical Resistivity, ρ		Ω · cmμ		N/A

(1) Coefficients measured between 20 and 200 °C

(2) Between 20 and 200 °C

(3) Between 20 and 150 °C