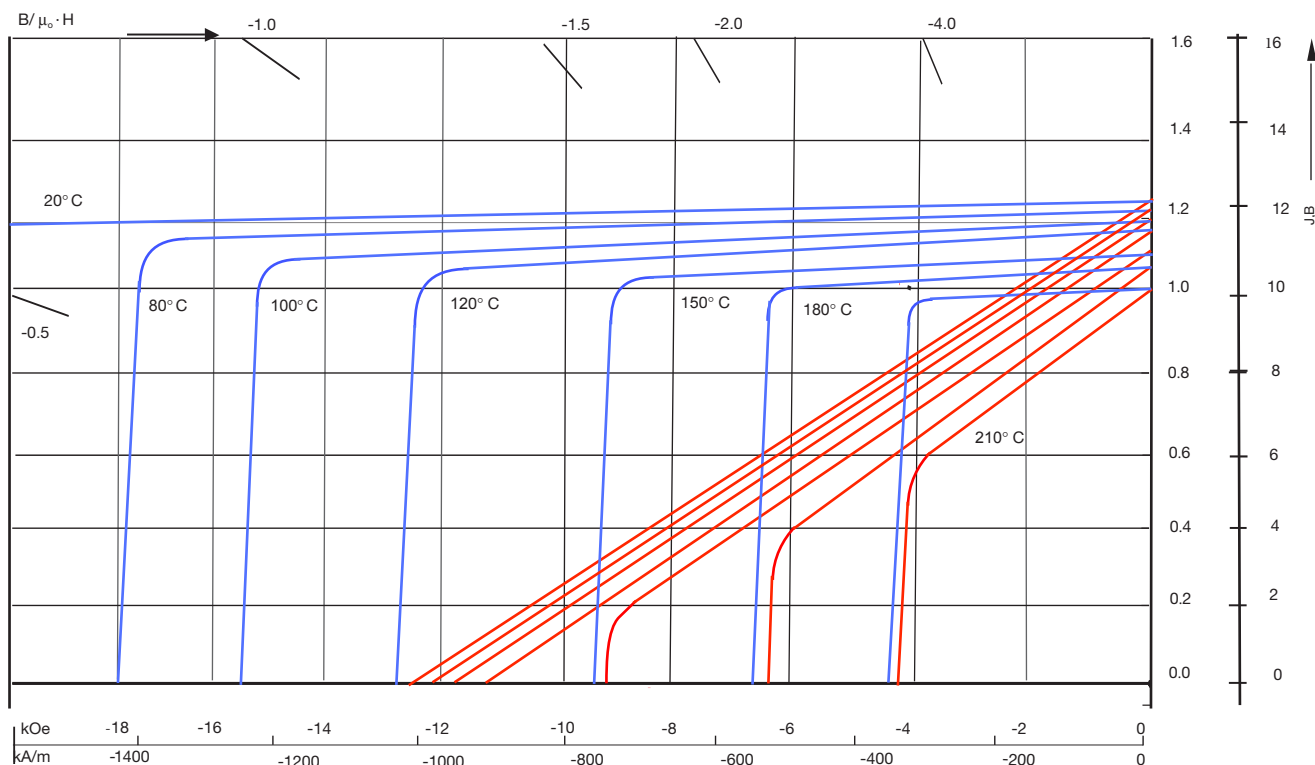


TDA MAGNETICS

Neodymium (Sintered) Grade ND4025

ND4025

Demagnetization Curves



| Magnetic Properties | | Units | min. | nominal |
|--|--|------------------------------|---------------|--------------|
| Br, Residual Induction | | Gauss | 12,500 | 12,900 |
| | | Tesla | 1.25 | 1.29 |
| H _c , Coercivity | | Oersteds | 11,900 | 12,500 |
| | | kA/m | 950 | 995 |
| H _{ci} , Intrinsic Coercivity | | Oersteds | 25,000 | 25,133 |
| | | kA/m | 2,000 | 2,400 |
| BH _{max} , Maximum Energy Product | | MGOe | 37.0 | 40 |
| | | kJ/m ³ | 295 | 315 |
| Physical Properties | | Units | C // | C ⊥ |
| Reversible Temperature Coefficients ⁽¹⁾ | | | | |
| of Induction, α(Br) | | %/°C | | -0.100 |
| of Coercivity, α(H _{ci}) | | %/°C | | -0.56 |
| 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, T _c | | °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