



ANISOTROPIC HARD FERRITE MAGNETS

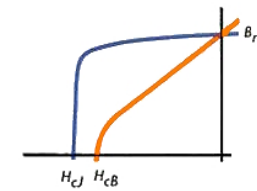
Magnetic properties

Grade	Remanence B_r	Coercive force H_{cB}	Intrinsic coercive force H_{cJ}	Maximum specific energy $(BH)_{\max}$	Material
SMI-5A	400 - 430 mT	225 - 285 kA/m	230 - 290 kA/m	30.9 - 35.0 kJ/m ³	SrFe ₁₂ O ₁₉
	4000 - 4300 G	2827 - 3581 Oe	2890 - 3644 Oe	3.9 - 4.4 MGOe	
SMI-5B	390 - 420 mT	250 - 295 kA/m	260 - 320 kA/m	30.1 - 34.2 kJ/m ³	SrFe ₁₂ O ₁₉
	3900 - 4200 G	3142 - 3707 Oe	3267 - 4021 Oe	3.8 - 4.3 MGOe	
SMI-6A	410 - 440 mT	230 - 275 kA/m	240 - 300 kA/m	35.1 - 38.1 kJ/m ³	SrFe ₁₂ O ₁₉
	4100 - 4400 G	2890 - 3456 Oe	3016 - 3770 Oe	4.4 - 4.8 MGOe	
JPM-7B	430 - 450 mT	250 - 295 kA/m	260 - 320 kA/m	34.6 - 38.3 kJ/m ³	SrFe ₁₂ O ₁₉ + additives
	4300 - 4500 G	3142 - 3707 Oe	3267 - 4021 Oe	4.3 - 4.8 MGOe	

For specific or higher grades, please contact us.

Other general characteristics

Mechanical properties		
Thermal expansion coefficient	//*	14 x 10 ⁻⁶ /°C
	⊥*	9 x 10 ⁻⁶ /°C
Density	d	4.7 - 5.1 g/cm ³
Magnetic properties		
Curie temperature	T _c	450 - 460 °C
Reversible temperature coefficient from -40°C to +200°C	Br	-0.2 %/°C
	H _{cJ}	+1 kA/m/°C
Other		
Electric resistivity	-	> 10 ⁴ W.m
Specific heat	-	0.15 - 0.20 cal/g.°C
Thermal conductivity	-	5 W/m.°C



Magnetic characteristics as measured at 20°C on axially oriented cylinders representative of volume production. Measurements on radially arcs may differ.

SMI grades:
100% manufactured in France
Raw material from Europe.

JPM grades:
Ferrite powder from our JPMF partner (China)

* as compared to average magnetic orientation axis of the material.

Explanations to read demagnetization curve.

