



BASIC PROPERTIES

- Ceramic that can be worked with conventional metal tools
- Does not require any annealing after machining
- Can be used at high temperature, in continuous work at 800°C and 1000°C at peak.
- Low thermal conductivity: high temperature insulator
- Excellent electrical insulator
- No porosity, no degazification
- Strong and rigid unlike plastics
- Is not prone to creep or deformation at high temperatures
- Resists to radiation
- Can be metallized in thick layers
- Can be polished

APPLICATIONS

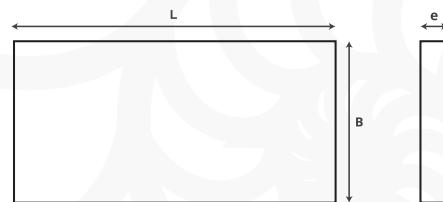
Electronic and semi conductor industries
Vacuum and ultra high vacuum industries
Nuclear industries
Medical
Optical
Aerospace
Lasers

MATERIAL		MACOR	
Chemical Formula		Machinable ceramic	
Aspect / color		White	
Porosity		Impervious	
Mechanical		Measuring unit	
Poisson's ratio		-	
Hardness		Rockwell	
Hardness		Knoop	
Shear modulus		GPa	
Young modulus at 25°C		GPa	
Compression resistance		MPa	
Flexion resistance at 25°C		MPa	
Tenacity		MPa.m ^{1/2}	
Physical			
Maximum temperature use		°C	
Continuous use maximum temperature		°C	
Density		g/cm ³	
Water absorption		%	
Electrical			
Dielectric constant at 25°C and 1 KHz		-	
Dielectric constant at 25°C and 8,5 KHz		-	
Volume resistivity at 25°C		Ohm x cm	
Disruptive resistance (at thickness 0,01 mm)		kV/mm	
Dielectric strength		μm/m-iC	
Thermal			
Specific heat at 25°		KJ/Kg.°K	
Thermal expansion coefficient from 25°C to 300°C		X10 ⁻⁷ /°C	
Thermal expansion coefficient from 25°C to 600°C		X10 ⁻⁷ /°C	
Thermal expansion coefficient from 25°C to 800°C		X10 ⁻⁷ /°C	
Thermal conductivity at 25°		W/m.°C	
Thermal diffusivity at 25°C		10 ⁻⁷ .m ² /s	

*These values are for informational purposes only and do not bind company's responsibility.

MACOR PLATES
(in mm)

L	I	Thick.
50	50	from 3 to 55 mm
100	100	
150	150	
300	300	
320	320	



SCERAM can provide any dimension on request. Please contact us for more information.