

# MACOR® Machinable Glass Ceramic Disk

**Formula:** SiO<sub>2</sub> 46/Al<sub>2</sub>O<sub>3</sub> 16/MgO 17/K<sub>2</sub>O 10/B<sub>2</sub>O<sub>3</sub> 7

**Thickness:** 2mm

**Diameter:** 25.4mm

**UOM Code:** 006-503-82

**SKU:** 1000000857-group

**Product Code:** MA80-SH-000120

## Material Properties for Glasses

### Chemical Resistance

Element	Value
Acids - concentrated	Poor
Acids - dilute	Fair
Alkalis	Fair
Halogens	0
Metals	0

### Electrical Properties

Element	Value
Dielectric constant	0
Dielectric strength( kV mm <sup>-1</sup> )	0
Volume resistivity( Ohmcm )	>10 <sup>12</sup> @25

### Mechanical Properties

Element	Value
Poisson's ratio	0
Tensile modulus( GPa )	67
Hardness - Knoop( kgf mm <sup>-2</sup> )	0
Hardness - Vickers( kgf mm <sup>-2</sup> )	400
Shear strength( MPa )	0
Tensile strength( MPa )	0
Fracture toughness( MPam <sup>0.5</sup> )	0

## Physical Properties

Element	Value
Refractive index	0
Useful optical transmission range	0
Apparent porosity( % )	0
Water absorption - saturation( % )	0
Density( gcm <sup>3</sup> )	2.52

## Thermal Properties

Element	Value
Melting point( C )	0
Sublimation point( C )	0
Upper continuous use temperature( C )	800-1000
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	790@25°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	1.5@20°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	13@20-1000°C

## Pultrusions

Element	Value
Compressive strength( MPa )	345