

## BASIC PROPERTIES

- Very high mechanical resistance (wear, abrasion...)
- This ceramic represents a perfect substitute for sapphire, with lower price
- High temperature resistance > 1200°C
- Perfectly dense material
- High RIT in the visible, UV and IR (such as sapphire and quartz)
- Machinable with high precision
- Polishable
- No open porosity

## APPLICATIONS

Balistic Armor windows  
Missile domes  
Transparent watch body  
Security windows  
High pressure windows  
High temperature windows  
Wear resistance windows

## SPECIFICATIONS

Diameter tolerances: +0.0/-0.1mm

Thickness tolerances: ±0.2mm

Transparency: >80%

Parallelism: <3' Frontwave dispersion:  $\lambda$  per 25mm at 632nm

Bevel: <0.35mm ×45°

## AVAILABLE STANDARD DIMENSIONS

Diam 25 x ép. 3 mm

Diam 30 x ép. 2 mm

Diam 50 x ép. 5 mm

Diam 76 x ép. 3 mm

Diam 100 x ép. 6 mm

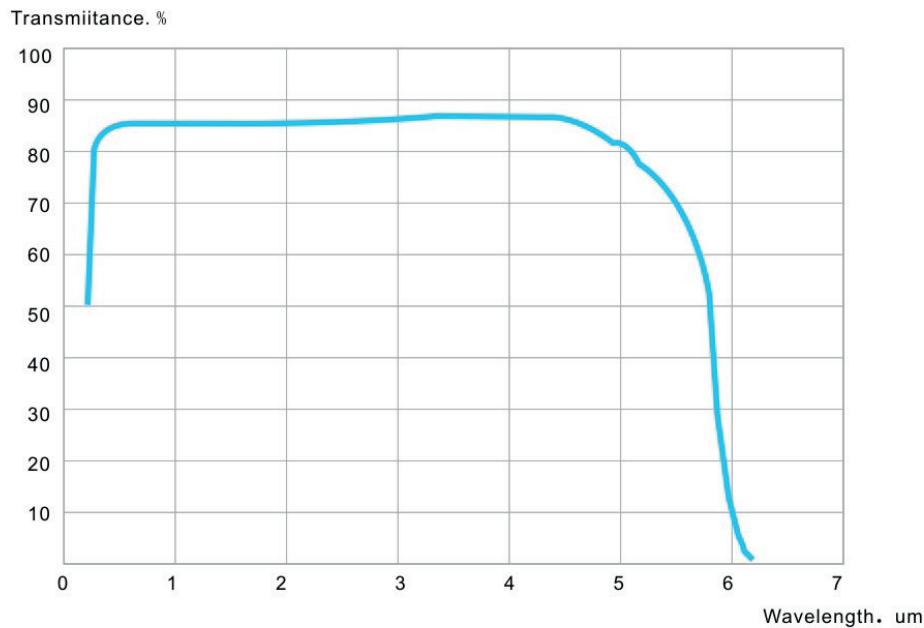
Diam 150 x ép. 10 mm

Diam 200 x ép. 10 mm

Diam 100 x ép. 6 mm

Diam 150 x ép. 10 mm

Diam 200 x ép. 10 mm



<b>MATERIAL</b>		<b>TRANSPARENT CERAMIC</b>
Chemical Formula		MgAl <sub>2</sub> O <sub>4</sub>
Aspect / color		Transparent
Water absorption	% at RT	0
Phase		Polycristaline
<b>Mechanical</b>		<b>Measuring unit</b>
Density	g/cm <sup>3</sup>	> 3,57
Hardness	Vickers (GPa)	> 14
Flexion resistance	MPa	150 / 200
Young modulus		280
<b>Optical</b>		
Transparency	RIT %	80% / 85%
Black spot	%	< 3
<b>Thermal</b>		
Thermal conductivity	W/m <sup>°K</sup>	> 15
Using temperature	°c	> 1200
Melting temperature	°c	> 1800 / 2000

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