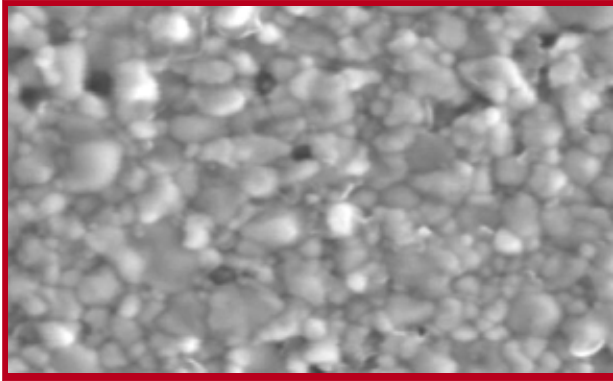


## Keraprotec

Substrates and planar components of zirconia oxide



fineness



hardness  $K_{1c}$  5,7 HV<sub>10</sub> 1390 +/-40



surface area



dimension

### APPLICATIONS:

**Keraprotec** can be used in various applications of electronics and sensor technology. Thin-planar components are produced according to your requirements for your sensor or other electronic assembly as a protection from abrasion through friction, temperature, corrosive media and impact.

In addition, compared to other commercially available ceramic substrates, components made from **Keraprotec** can be produced up to a length of 400 mm.

## Keraprotec

Substrates and planar components of zirconia oxide

### ADVANTAGES:

- high corrosion resistance
- high abrasion resistance
- very good gliding properties
- good electrical isolation
- low thermal conductivity
- very good mechanical strength
- cuttable with laser
- small thickness

### CHARACTERISTICS:

Characteristics	Unit	Keraprotec
Colour		white, yellowish
Density	g/cm <sup>3</sup>	5.85
Surface roughness R <sub>max</sub> (upper side)	µm	7
Surface roughness R <sub>max</sub> (lower side)	µm	2
Surface roughness R <sub>a</sub> (upper side)	µm	0.8
Surface roughness R <sub>a</sub> (lower side)	µm	0.2
Bending strength (double ring KF)	MPa	approx. 1000 (0.350 mm thickness)
Thermal conductivity	W/mK	1.7
Dielectrical strength	KV/mm	> 30
Thermal expansion coefficient [600°C]	10 <sup>-6</sup> K <sup>-1</sup>	10.5
K <sub>1c</sub>	(Nihara)	5.7
Hardness Vickers (thickness: 0,6 mm)	(HV <sub>10</sub> )	1390 +/- 40

### Additional service:

We offer laser drilling and cutting of your "Keraprotec" components.

Standard material thickness: 0.25 / 0.38 / 0.5 mm

Standard formats: 101.6 x 101.6 / 200 x 200 mm

**Customized formats on request!**