

PSZ

Zirconia substrates



MATERIAL:

- dense substrates of zirconia oxide ceramic
- stabilized with 5 mol% yttrium oxide

ADVANTAGES:

- high corrosion resistance
- high abrasion resistance
- very good gliding properties
- good electrical isolation
- good thermal conductivity
- good mechanical strength
- drilling, scribing and profiling by laser possible

APPLICATIONS:

PSZ is used in different areas of technical ceramics, sensor technology, in thickfilm technology or where ever high abrasion resistance is needed.

CHARACTERISTICS:

Characteristics	Unit	PSZ
Colour		white, yellowish
Density	g/cm ³	5.85
Surface roughness R _{max} (upper side)	µm	7
Surface roughness R _{max} (lower side)	µm	2
Surface roughness R _a (upper side)	µm	0.8
Surface roughness R _a (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 ⁻⁶ K ⁻¹	10.5