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Customized solutions.

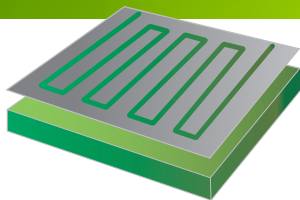
We are looking forward to receiving your inquiry!

Kerafol® products are applied in vehicle electronics, medical applications, electronics, engineering, processing aids – in fact in all areas, in which high performance ceramic materials are irreplaceable.

Discover our wide variety of products and take advantage of the diverse application possibilities!

Thin zirconia substrates
3YSZ, 40 µm

Thin zirconia substrates



3 mol-% yttria stabilized zirconia – 3YSZ

Characteristics	Value	Unit
Colour	White	-
Density	6.0	g/cm ³
Surface	as fired	-
Surface roughness R _a	~ 50	nm
Evenness	< 20	µm
Bending strength	600	MPa
Dielectric strength at 20°C	60	kV/mm
Thermal conductivity	2	W/mK
Thermal expansion coefficient	~ 12	10 ⁻⁶ /K
Thickness	40	µm
Max. available dimension	150 x 150	mm ²
	laser cutting to customer specified geometries possible	
Main components	ZrO ₂ , Y ₂ O ₃	-

Originally developed as a thin electrolyte for solid oxide fuel cells, those substrates are excellently suited for electronics applications as well. Their low thickness, high planarity and great flexibility make them a perfect choice for thin film processes or curved fittings.

Data for design engineer guidance only.
Observed performance varies depending on application.
Engineers are reminded to test the material in application.

