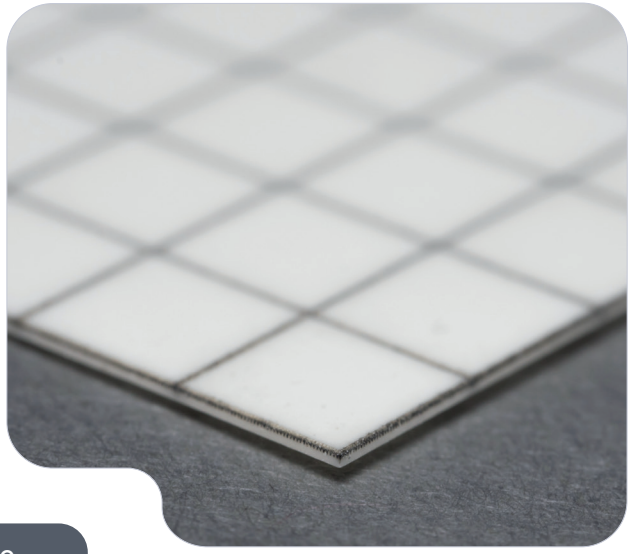
ATS
Alumina Thinfilm-Substrates

Applications

- thinfilm application, e.g. temperature sensors

Advantages

- very fine-grained homogeneous grain structure < 1 micron
- good electrical insulation properties
- high mechanical strength
- processing by laser or waver saw possible, very low on chipping
- very good evenness
- outstanding performance for thinfilm applications



Typical characteristics	Unit	Value
Colour		white
Density	g/cm³	4
Surface roughness R_a	µm	< 0.08
Bending strength	MPa	> 600
Evenness	µm	50
Dielectric strenght at 20°C	kV/mm	> 10
Thermal conductivity	W/mK	22
Standard dimensions	mm	101.6 x 101.6 and 50.8 x 50.8
Thickness	mm	0.25 up to 0.38
Structure		dense
Main components	%	96% Al_2O_3 4% ZrO_2

This zirconia toughened alumina substrate material shows very good results after laser scribing and breaking, or even when cut with a waver saw. ATS has been developed especially for thinfilm applications. ATS can be easily cut or structured by laser or waver saw. Due to its inner mechanical strength and fine grains the material has much less material chipping at the processing edges during manufacturing process compared to other materials. Due to the very fine grains of the ATS very fine Pt-structures are possible.

We cut the material according to your wishes! Please send in your CAD data.

Note

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The specifications provided in this data sheet do not constitute a guarantee or warranty of specific product properties („quality guarantee“). These specifications are derived from our standardized testing procedures conducted under controlled laboratory conditions and are intended to describe the typical properties of the products as expected under standard applications. Variations may occur depending on the specific application. Accordingly, it is the responsibility of the customer to test and evaluate the products for their intended use, and adjustments to the application may be required.

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