THERMAL CONDUCTIVITY
(W/m·°K)

25

KU-ALO

150

KU-ALN

Electrically insulating

The Heatmanagement Company

Thermally conductive ceramics KU-ALN and KU-ALO

The ceramic plates made from aluminium nitride and aluminium oxide possess extremely high thermal conductivity, dielectric strength, and mechanical stability. They meet the highest requirements regarding operating temperatures.
Ceramic plates can typically be implemented in gauges between 0.5 and 3 or 5 mm (or more), depending on specifications.
For compensation of ruggedness or unevenness of the contact surfaces, a malleable interface material is required.
The ceramic plates made from aluminium nitride and aluminium oxide possess extremely high thermal conductivity, dielectric strength, and mechanical stability. They meet the highest requirements regarding operating temperatures.

PROPERTIES

- Extremely high thermal conductivity
- High dielectric strength
- Very high temperature resistance
- Very stable

Thermally conductive ceramics KU-ALN and KU-ALO

PART	KU-	ALN	ALO
GENERAL PROPERTIES			
Material		Aluminium-nitride	Aluminium-oxide (AL^2O^3)
Colour		Bright grey	White
Material purity	%		96
MECHANICAL PROPERTIES			
Smoothness, unpolished, 25 mm flatness	mm	0,025	0,15
Compressive strength	kN / mm^2	2,1	3,0
Flexural strength	N / mm^2	350	380
Roughness, unfinished	µm	~ 0.6	0.9 - ~ 1.3
ELECTRICAL PROPERTIES			
Dielectric strength	kV/mm	25	10
Volume resistivity	(Ωm)	1,0 x 10^{10}	1,0 x 10^{12}
Dielectric constant (1 kHz)		8,6	9,6
THERMAL PROPERTIES			
Thermal conductivity	W/mK	150	25
Operating temperature	°C	-68 to 850	

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Kunze Folien GmbH · Raiffeisenallee 12a · 82041 Oberhaching · Phone: +49 (0) 89 66 66 82 -0 · Fax: +49 (0) 89 66 66 82 -10
sales@heatmanagement.com · www.heatmanagement.com