Advanced Ceramic Material



3) 95 Al₂O₃ Ceramic Material Properties

95% Al₂O₃ Aluminum oxide ceramics mainly used for insulators of electronic, engineering structural ceramics and other electrical device with wear-resistant and corrosion-resistant, which are widely applied in the fields of machinery, chemical and textile industry, path instrument, computers, electricity, telecommunication and others



Benefits:

- High mechanical strength and low wear and tear.
- High dielectric strength and low dielectric loss
- High heat resistant, low transmogrification.

95 Al₂O₃ CERAMIC PARTS MATERIAL PROPERTIES

PROPERTY	TESTING CONDITIONS	UNITS	VALUE
COLOR			WHITE
APPEARANCE			DENSE
GAS PERMEABILITY			0
DENSITY		g/cm³	>3.6
WATER ABSORPTION		%	0
MEDIUM GRAIN SIZE		μm	10~35
FLEXURAL STRENGTH		kgf/cm²	2800
COEFFICIENT OF LINER EXPANSION	20~500℃	1×10⁴mm/℃	6.5 - 7.5
	20~800℃		6.5 - 8.0
COEFFICIENT OF THE THERMAL CONDUCTIVITY		Cal/Cm • S • °C	≥0.03
DIELECTRIC STRENGTH		KV/mm	15
VOLUME RESISTIVITY	100℃	Ωcm	≥10 ¹³
	300℃		≥10 ¹⁰
	500℃		≥1 0 ⁸
DIELECTRIC CONSTANT	1MHz 20℃		9~10
DIELECTRIC LOSS (TAN DELTA)	1MHz 20℃		≤4X10 ⁻⁴