

TECHNICAL INFORMATION

Thick Film Ceramic Al₂O₃

Characteristics	Unit	Value
Alumina Content	Weight %	96
Color	-	White
Density	g/cm ³	3.75 min
Hardness-Rockwell	-	82
Surface Finish-CLA (as-fired)	Microinches	< 35
Average Grain Size	Micrometer	4-7
Water Absorbtion	%	NIL
Gas Permeability	-	NIL
Flexural Strength	Kpsi (MPa)	58 (400)
Elastic Modulus	10 ⁶ psi (GPa)	44 (331)
Poisson's Ratio	-	.25
Coefficient of Linear Thermal Expansion @ 25-200°C	10 ⁻⁶ /K	6.4
Thermal Conductivity @ 20°C (100°C)	W/mK	26 (20)
Dielectric Strength	Volts/mil	600
Dielectric Constant @ 25°C	-	9.5
Dissipations Factor @ 1kHz (1MHz), 25°C	-	.0010 (.0004)
Loss Index @ 1kHz (1MHz), 25°C	-	.009 (.004)
Electrical Resistivity @ 25°C (300°C)	Ohmcm	> 10 ¹⁴ (1.0x10 ¹²)