



Metallized Ceramics

Precision machining and metallizing services of ceramic materials for custom designed products are performed all under one roof. Prototype to full production with fast turnaround.

- Aluminum Nitride
- Aluminum Oxide
- Angled Surfaces
- Excellent Solderability
- Assemblies and Sub Assemblies
- Precision Machining
- Brazing
- Heat Sink Insulators



Typical Property Values, Selected Ceramic Materials

Property	Thermal Conductivity	Electrical Resistivity	Dielectric Constant	Coefficient of Thermal Expansion	Density
Units	W/m ⁰ K	Ohm-cm	RT-1 MHz	10 ⁻⁶ °C	Grams/cm ³
AlN Aluminum Nitride	170-190	>10 ¹⁴	8.9	4.6	3.30
Al₂O₃ 94.0% Aluminum Oxide	20.5	>10 ¹⁴	9.91	6.3-9.1	3.67
Al₂O₃ 96.0% Aluminum Oxide	25.6	>10 ¹⁴	10.10	6.4-9.0	3.72
Al₂O₃ 96.0% Aluminum Oxide	26.8	>10 ¹⁴	10.14	6.9-9.0	3.76
Al₂O₃ 99.5% Aluminum Oxide	29.3	>10 ¹⁴	10.20	6.9-9.4	3.89
BeO 99.0% Beryllium Oxide	260	>10 ¹⁴	6.7	8.5	2.85
Copper	393	—	—	17.0	8.93
GaAs	54	3.8 x 10 ⁸	—	6.5	5.32
Si	151	2.3 x 10 ⁵	—	4.2	2.3

NOTE: The information set forth herein is offered for comparison only.



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