

High-Strength AlN Substrate

Thermal conductivity rivaling metals! — Thermalnite® enhanced
The Highest Mechanical Strength in AlN History!

Ceramic Product



Item	Unit	Characteristic Value
Size	inch	□4.5
Thickness	mm	0.2 ~ 1.0
Thermal Conductivity	W/m · K	170, 200, 230

① Measured values, not product specifications.

② See separate AlN lineup sheet.

Features

High
Thermal
Conductivity

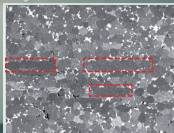
High Mechanical
Strength
Fracture Toughness:
2× conventional

Benefits

01 Improved heat dissipation enables high-density, compact design

02 Suppression of micro-crack propagation (Thermalnite® fiber reinforcement)

SEM image (Thermalnite® fiber reinforcement)



Applications

- LED/LD Modules (Headlights, vehicle LED, communication optical transceivers, etc.)
- Power Modules (Railway inverters, wind power generators, machine tools, solar power, emergency power supplies (UPS))