REFRACTORY MOLYBDENUM ON ALUMINUM NITRIDE

Nickel-plated refractory Molybdenum (Mo) on aluminum nitride – the reliable, low cost system for high performance heat spreaders. Aluminum nitride provides both high thermal conductivity and low thermal expansion, making it an ideal substrate for both large and high power devices.

Sienna's refractory Mo metallization technology offers:

- Outstanding adhesion with excellent thermal aging performance
- Significant cost/performance advantages
- No toxicity Aluminum Nitride poses no special disposal requirements

These qualities make Sienna Mo metallization technology an ideal choice for devices demanding the utmost in thermal management such as:

- Ignition Modules
- Rectifiers
- Power Transistors
- Solid-state Relays
- Motor Controllers





REFRACTORY MOLYBDENUM ON ALUMINUM NITRIDE

METALLIZATION		
Base Layer	Mo-Mn thick film	13 μm thick (typical)
Plating	Electrolytic Nickel	2 μm – 4 μm (typical)
Overplate	Gold or Silver	(optional)
Resistivity	32 mΩ/square 3 mΩ/square	Standard metallized product Ni plated product
Line resolution	150 μm	Minimum trace/space width
Solderability	Excellent	
ADHESION		
Pull strength	≥68.9 MPa	
Pull strength after aging	-	
Pull strength thermal cycling	-	

Sienna's technical team is ready to help you implement Aluminum Nitride in your next generation of products.

Contact us for applications assistance and fast prototyping.

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