

AlN submount substrate

AlN submount is highly functional part that has superior characteristic of high thermal conductivity and high strength that is realized by Aluminum Nitride.

As product lineup, we offer AlN substrates with Ti / Pt / Au / AuSn / Cu thin film on the surface formed by lift off process.

Especially for Cu plated substrates, it excels in heat dissipation and it is also thick Cu plating that makes possible to achieve higher output.

AlN submount is used in low to high output laser diodes for DVC / CD light pickup, optical communication, processing machines and cinema applications.

It is also optimum solution for heat dissipation substrates of deep ultraviolet and high output LED that requires high heat dissipation characteristic.



Standard specifications

Item		Unit	Ceramics			
			TAN-170	TAN-200	TAN-230	TAN-250
AlN materials	Thermal conductivity	W/m·K	160-180	190-210	220-235	240-255
	Thickness	mm	0.20-0.35			
	Thickness tolerances	mm	±0.02			
Conductive films	Film structure	—	Ti/Pt/Au			
	Film thickness	μm	0.5-3.5 (With patterns)			
	Thickness tolerances	%	±20			
Solder film	Film structure	—	Au-Sn (Au: 64-78wt%)			
	Film thickness	μm	0.5-3.5 (With patterns), 0.5-5.0 (Without patterns)			
	Thickness tolerances	%	±20			
Patterns	Patterning tolerances	μm	±20			
Dicing	Dicing tolerances	μm	±30			
	Packing		Mounted on tape			

