

SPECIFICATION OF PRODUCTS

Name: T-Clad

Spec: GM-AL series

GM-AL-M-01

T-Clad key feature

Item	Unit		Specification
Insulation thickness	jm	Min	50
Solder resistance (288 deg.c)	Sec.	Min	150
Peel strength normal status	Lb / in	Min	15
Volume resistivity normal status	MQ.CM		10^7
Surface resistivity normal status	MQ		10^6
Dielectric constant 1 KHz normal status			4.9
1 Mhz normal status			4.6
Dissipation Factor 1 KHz normal status			0.026
1 MHz normal status			0.023
Water absorption	%		0.1
Breakdown Voltage	KV		4 KV
Thermal conductivity (Measured on insulation layer only)	W / m .K		<1.0
Flameability	94V-0		Pass

ALU thickness, size

Items	GM-AL-M-01				
Structure	Copper Prepreg AL board				
size (mm)	Normal 500*600 & customized size needs to be appointed. (Max size: 640mm*1280mm)				
Normal thickness (mm)	2.0 1 OZ	1.5 1OZ	1.5 2OZ	1.0 1OZ	0.8 1OZ
Notes:	Above ALU PCB is special treated which can completely avoid foam broken and layering broken.				

- Above thickness not included mask & copper thickness, and it can achieve any combination with copper thickness and PCB thickness
- Copper thickness : H oz ~ 5.0 oz ,
- ALU PCB thickness : 0.8, 1.0 , 1.2, 1.5 , 2.0 , 3.2mm (± 0.10 mm)

GM-AL-H-02

T-Clad key feature

Item	Unit		Specification
Insulation thickness	urn		100300
Solder resistance (288deg.c)	Sec.	Min	150
Peel strength normal status	Lb / in	Min	9
Breakdown Voltage	KV		4
Volume resistivity normal status	MQ.CM		10 ⁸
Surface resistivity normal status	MQ		10 ⁷
Dielectric constant			
1 KHz normal status			4.5
1 Mhz normal status			4.2
Dissipation Factor			
1 KHz normal status			0.026
1 MHz normal status			0.023
Water absorption	%		0.03
Thermal conductivity (Measured on insulation layer only)	W / m .K		3.0
Flameability	94V-0		Pass

ALU thickness, size

Items	GM-AL-H-02				
Structure	Copper HL-preg AL board				
Size (inch)	18*24				
Normal thickness (mm)	2.0 10Z	1.5 10Z	1.5 20Z	1.0 10Z	0.8 10Z
Notes:	Above ALU PCB is special treated which can completely avoid foam broken and layering broken.				

- Above thickness not included mask & copper thickness, and it can achieve any combination with copper thickness and PCB thickness
- Copper thickness : H oz ~ 5.0 oz ,
- ALU PCB thickness : 0.8, 1.0 , 1.2, 1.5 , 2.0 , 3.2mm ($\pm 0.10\text{mm}$)
- Complied to RoHs

GM-AL-H-03

T-Clad key feature

Item	Unit		Specification
Insulation thickness	l m		60Й.120
Solder resistance (288deg.c)	Sec.	Min	120
Peel strength normal status	Lb / in	Min	12
Breakdown Voltage	KV		4
Volume resistivity normal status	MQ.CM		10 ⁸
Surface resistivity normal status	MQ		10 ⁷
Dielectric constant			
1 KHz normal status			7.3
1 Mhz normal status			7.0
Dissipation Factor			
1 KHz normal status			0.0076
1 MHz normal status			0.0018
Water absorption	%		0.03
Thermal conductivity (Measured on insulation layer only)	W / m . K	Min	2-3
Flameability	94V-0		Pass

ALU thickness, size

Item	GM-AL-H-03 (80-250um)				
Structure	Copper HJ-preg AL board				
Size: MM	500MM*600MM.415MM*610MM				
Normal thickness (mm)	2.0 10Z	1.5 10Z	1.5 20Z	1.0 10Z	0.8 10Z
Notes	Above ALU PCB is special treated which can completely avoid foam broken and layering broken.				

- Above thickness not included mask & copper thickness, and it can achieve any combination with copper thickness and PCB thickness
- Copper thickness : H oz ~ 5.0 oz ,
- ALU PCB thickness : 0.8, 1.0 , 1.2, 1.5 , 2.0 , 3.2mm (± 0.10 mm)
- Complied to RoHS

GM-AL-H-04

aluminium alloy plate

Item	Unit		Specification
Insulation thickness	ur		60-200
Solder resistance (288deg.c)	Sec.	Min	150
Peel strength normal status	Lb / in	Min	15
Breakdown Voltage	KV		4
Volume resistivity normal status	MQ.CM		10 ⁸
Surface resistivity normal status	MQ		10 ⁷
Dielectric constant			
1 KHz normal status			4.5
1 Mhz normal status			4.2
Dissipation Factor			
1 KHz normal status			0.026
1 MHz normal status			0.023
Water absorption	%		0.03
Thermal conductivity (Measured on insulation layer only)	W / m . K		1.0-2.0
Flameability	94V-0		Pass

ALU thickness, size

Item	GM-AL-H-04 (60-200um)				
Structure	Copper HA-preg AL board				
Size inch	18*24				
Normal thickness	2.0 10Z	1.5 10Z	1.5 20Z	1.0 10Z	0.8 10Z
Notes	Above aluminium alloy is special treated which can completely avoid foam broken and layering broken.				

- Above thickness not included mask & copper thickness, and it can achieve any combination with copper thickness and PCB thickness
- Copper thickness : H oz ~ 5.0 oz ,
- ALU PCB thickness : 0.8, 1.0 , 1.2, 1.5 , 2.0 , 3.2mm ($\pm 0.10\text{mm}$)
- Complied to RoHs