



Doosan Corporation
Electro-Materials

Laser Drillable Prepreg (LD)

COPPER CLAD LAMINATES

Insulating material composed of impregnated glass web (GP) or glass fabric (LD), can be used as a cap layer of MLB

Applications

- Mass via formation for high density cap layer or 2~3 ply constructions
- Packaging solution for thinner and lighter product

Features

- The ease of laser processing : Suitable for mass-via formation by CO₂ laser
- Excellent laser drilling process ability : Improved via hole processing accuracy compared to conventional prepreg
- Good via hole productivity : cleaner holes after ablation and reduced microcrack
- Superior rigidity in build-up multi-layer boards
- Handling : Good handling property compared to RCC
- Low cost
- Improved thickness control
- Compatibility : Compatible with existing lamination process

Products

Glass Paper

Glass paper thickness 65 μ m 80 μ m	Resin content 87%	Working size (width) up to 1,000mm
----------------------------------------------------------	-----------------------------	----------------------------------------------

Laser Drillable prepreg

Glass type # 106 # 1080	Resin content 68 \pm 2% 62 \pm 2%	Working size (width) up to 1,000mm
--------------------------------------	----------------------------------------------------	----------------------------------------------

HANDLING

- Glass Paper and Laser Drillable Prepreg must be stored avoiding exposure to moisture or high temperature
- Recommended storage conditions are 20 \pm 2 $^{\circ}$ C at 40% with relative humidity.

COPPER CLAD LAMINATES

Parameters

Designation	Resin Type	Glass Type	Resin Content (%)	Gel Time (sec)	Resin Flow (%)	Volatile Content (%)
DDS-7408(LD)	Tetra-functional	106	68±2	85±10	30±5	Max 0.60
	Epoxy	1080	62±2	85±10	30±5	Max 0.60
DS-7409(LD)	Multi-functional	106	68±2	120±10	30±5	Max 0.60
	Epoxy	1080	62±2	120±10	30±5	Max 0.60

Pressing Cycle of Glass Paper (Platen Temperature)

- Put the material prepared into the pressure of 10kgf/cm² raising the temperature up to 130°C and change the pressure into 30kgf/cm² when it comes to 130°C.
- After keeping the temperature at 130°C for 15min, raise the temperature up to 185°C.
- Keep the temperature at 185°C for 100min and then cool it down until the temperature at 60°C.

