



Laser Drilling Prepreg

Datasheets

LD PP

VT-42PP

VT-44/441PP VT-447PP

VT-48/481PP VT-47PP

VT-901PP

1037\ 106\ 1067\ 1078\ 1086 Prepreg

General Information

- Equivalent material of Resin Coated Copper (RCC)
- Excellent Laser Drilling Ability
- Better Dimension Stability, Lower Cost and Longer Shelf Life (by comparison with RCC)

Application

High Density Mounting (Build-Up Material)

Availability

We can supply every kind of prepreg used for laser drilling, such as 1086 PP, 1078PP, 1067 PP, 106 PP, 1037PP.

If you need LD PP of different resin system, there is some difference with the normal resin content.

Usual resin content and press thickness:

	1037	106		1067		1078		1086	
VT-42/45/461	75%	70%	75%	70%	74%	63%	66%	62%	65%
VT-47/481/441/447	76%	72%	76%	71%	75%	64%	68%	63%	66%
VT-901	74%	68%	72%	68%	72%	60%	63%	60%	63%
Pressed Thickness	1.5mil	1.7mil	2.0mil	1.9mil	2.2mil	2.6mil	3.1mil	3.0mil	3.2mil

Storage Condition & Shelf Life

		Prepreg	
Storage Condition	Temperature	Below 23°C(73°F)	Below 5°C(41°F)
	Relative Humidity	Below 55%RH	/
Shelf Time*		3 Months	6 Months

The pre-preg exceeding shelf time should be retested.



Laser Drilling Prepreg

Property Sheet

CHARACTERISTIC	1067	106**
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Information of Glass Fabric

WEAVE		PLAIN	PLAIN
YARN	Warp	D-900 1/0	D-900 1/0
	Fill	D-900 1/0	D-900 1/0
Glass Fabric Thickness	(mm[mil])	0.032[1.3]	0.033[1.2]
Basic Weight	(gsm)	30	25
Thread Count(EPI)	Warp	70	70
	Fill	70	70

Information of Prepreg

Items	VT-42/ 45/461	VT-441/447 /481/47	VT-901	VT-42	
Standard Shot Number of Laser Drilling	1~3	1~3	1~3	2~4	
Usual Resin Content & Pressed	Resin Content	70%	71%	68%	70%
Thickness	Pressed thk.	1.7mil (44um)		1.9mil(48um)	

CHARACTERISTIC	1086	1078	1080**
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Information of Glass Fabric

WEAVE		PLAIN	PLAIN	PLAIN
YARN	Warp	D-450 1/0	D-450 1/0	D-450 1/0
	Fill	D-450 1/0	D-450 1/0	D-450 1/0
Glass Fabric Thickness	(mm[mil])	0.054 [2.1]	0.045 [1.7]	0.056[2.2]
Basic Weight	(gsm)	54	48	47
Thread Count(EPI)	Warp	60	53	60
	Fill	60	53	47

Information of Prepreg

Items	VT-42/ 45/461	VT-441/447 /481/47	VT-901	VT-42/ 45/461	VT-441/447 /481/47	VT-901	VT-42	
Standard Shot Number of Laser Drilling	2~4	2~4	2~4	2~4	2~4	2~4	4~6	
Usual Resin Content &	Resin content	62%	63%	60%	63%	64%	60%	63%
Pressed Thickness	Pressed thk.	3.0mil(75um)			2.6mil(66um)		2.8mil (71um)	

※ All testdata provided are typical values and not intended to be specification values.

※ "***" Normal Glass Fabric listed for reference.



Laser Drilling Prepreg

Property Sheet

CHARACTERISTIC		1037	104**		
Information of Glass Fabric					
WEAVE		PLAIN	PLAIN		
YARN	Warp	C 1200 1/0	D900 1/0		
	Fill	C 1200 1/0	D1800 1/0		
Glass Fabric Thickness	(mm[mil])	0.027 (1.1mil)	0.028 (1.1mil)		
Basic Weight	(gsm)	24	19		
Thread Count(EPI)	Warp	69	60		
	Fill	72	52		
Information of Prepreg					
Item		VT-42/45/461	VT-441/447 /481/47	VT-901	VT-42
Standard Shot Number of Laser Drilling		1~2	1~2	1~2	1~3
Usual Resin Content and	Resin content	75%	76%	74%	75%
Pressed Thickness	Pressed thk.		1.5mil (38um)		1.3mil(33um)

※ All testdata provided are typical values and not intended to be specification values.

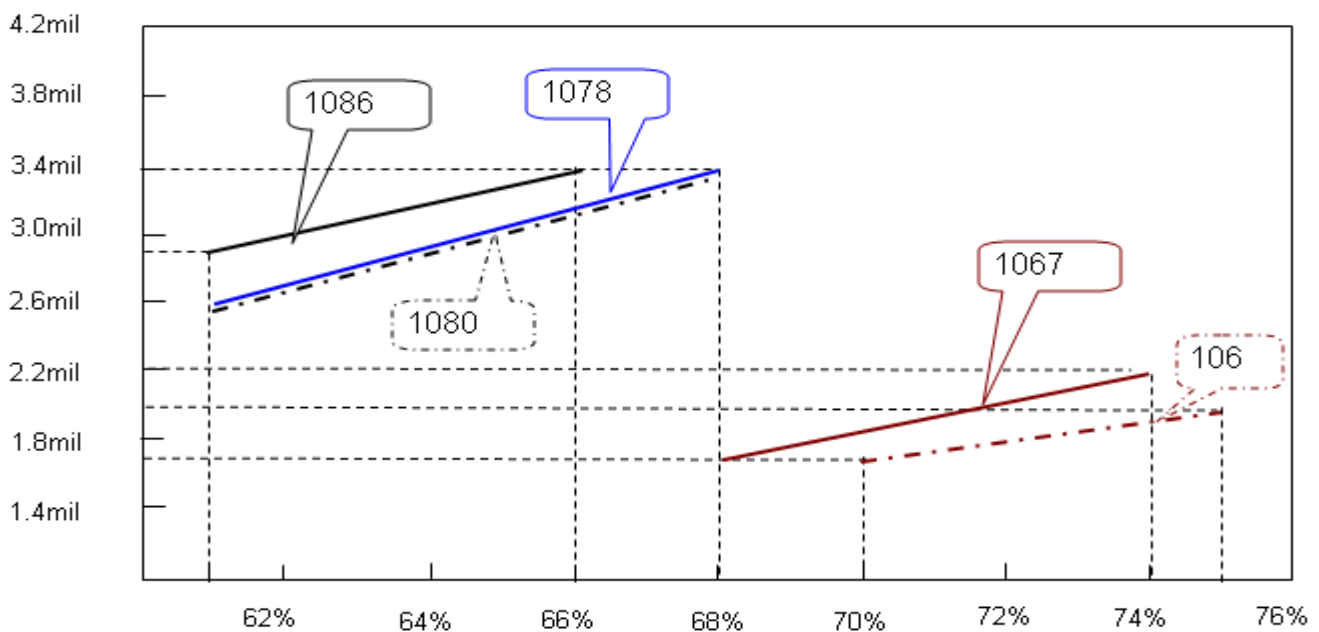
※ “***” Normal Glass Fabric listed for reference.



Laser Drilling Prepreg

Dielectric thickness of single ply under different resin content with 100% Lifted Lands

(1oz/1oz) [35 μ m/35 μ m] unit: mil



Note: 1) Above is the dielectric thickness of VT-42, VT-45 and VT-461;
2) The thickness is measured by microscope after making test board to micro-section.
(Thickness measured by microscope is always 0.2~0.4 thinner than that measured by micrometer)