

DS-7409HG, DS-7409HG B

(ANSI: FR-4) HALOGEN FREE & PHOSPHORUS FREE MATERIAL

Features

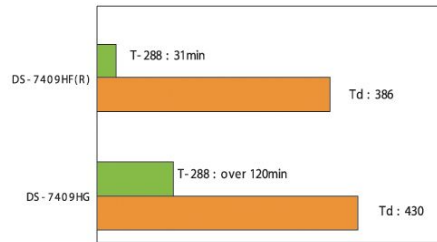
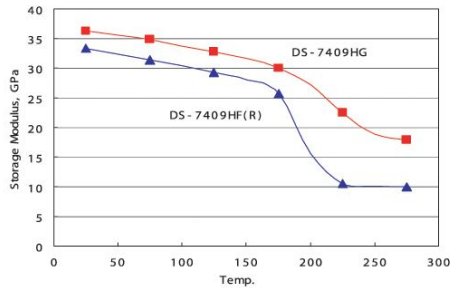
- Halogen & phosphorus free
- Low thermal expansion
- High elastic modulus
- Superior heat resistance
- UV blocking & AOI compatible

Applications

- PBGA, BoC, CSP, FCBGA, FCCSP etc.



General Properties



Test Item	Unit	Test Method	Treatment Condition	Typical Value
Peel Strength (Cu foil 1oz)	kgf/cm	IPC-TM -650 2.4.8	A	0.8
CTE X-axis	ppm/°C	IPC-TM -650 2.4.24.5	ambient to Tg	13
Y-axis				13
Z-axis				25
Tg	°C	IPC-TM -650 2.4.24.3 IPC-TM -650 2.4.24c	DMA TMA	240 200
Decomposition Temperature	°C	IPC-TM -650 2.4.24.6	5% loss, TGA	430
T-288	min	IPC-TM -650 2.4.24.1	TMA	over 100
Dielectric Constant (1GHz)	-	IPC-TM -650 2.5.5.9	1GHz, A condition	4.6
Dissipation Factor (1GHz)	-	IPC-TM -650 2.5.5.9	C-96/20/65 C-96/20/65 + D-48/50	0.007 ~ 0.012 0.010 ~ 0.015
Young's Modulus	GPa		A	32

Specimen thickness: 0.8 mm

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Prepreg Parameter

[Thin Core] DS-7408 (LT)

Thickness (mm)	Glass Fabric	Copper Foil spec.
0.04	1015 x 2 / 1037 x 1	T/T, H/H, 1/1
0.05	1027 x 2 / 1035 x 1	
0.06	1037 x 2 / 1035 x 2 / 1015 x 3	
0.10	1078 x 2 / 2116 x 1	
0.15	1078 x 3 / 1501 x 2	
0.20	1078 x 4 / 2116 x 2	
0.40	7628 x 3	
0.80	7628 x 4	

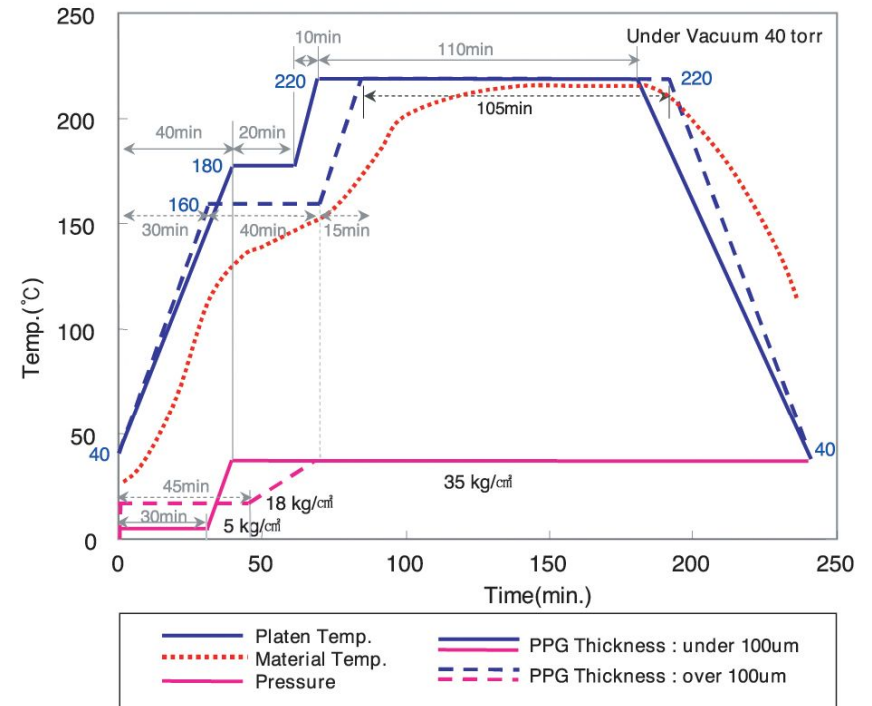
[Bonding Sheet] DS-7408 (LT)

Glass Fabric	Resin Content	Thickness (mm)
1037	74%	0.04
2116	58%	0.10

* Data of Resin Content and Thickness are typical values.
Each value has variation of about ±3%, 0.05 mm.

- * 0: No copper, T: 1/3 oz, H: 0.5 oz, 1: 1 oz, 2: 2 oz
- * 1/1: 1oz copper foil on one side / 1oz on the other side
- * Thickness data are typical values.
- * Each value has variation of about ±(0.1~0.2)mm.

Recommended Press Cycle



- Material heating rate (80~130°C) : 1.7 ~ 2.3 °C/min
- Curing condition : above 200°C 90min~