

# DS-7409S(N)

## (ANSI: FR-4) Excellent Heat Resistance

### Features

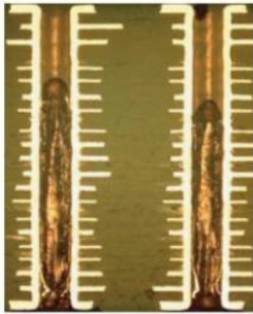
- High Tg (above 170°C)
- Excellent thermal performance
- Good moisture resistance
- CAF resistant
- Suitable for lead-free soldering process

### Applications

- High layer count boards
- High density multi-layer boards
- Servers, advanced computers, workstations and automobiles

### General Properties

#### ● Multiple Thermal Excursion Test Result



- Test Condition
  - 20L PCB
  - Thickness 2.3mm
  - 6 Times @288°C/10sec
  - Drill Hole Size 250mic
  - Pitch 39.4mil
- Test Result
  - No Crack
  - No Delamination

#### ● Thermal Shock Test Result after Moisture Treatment

Test Condition (1.0T)	DS-7409S(N)	Standard Tg
PCT 1hr + Solder Dipping 288°C/10sec	○ ○ ○	○ ○ ×
PCT 2hr + Solder Dipping 288°C/10sec	○ ○ ○	○ × ×
PCT 3hr + Solder Dipping 288°C/10sec	○ ○ ○	× × ×

○ : No Abnormality    × : Measling or Delamination

Property	Unit	Test Condition	Typical Value	Test Method
Tg	°C	DSC	170	IPC-TM-650.2.4.25c
		TMA	165	IPC-TM-650.2.4.24c
CTE Z-axis	ppm/°C	Ambient to Tg	50	IPC-TM-650.2.4.41
Z-axis Expansion	%	50°C to 260°C	3.2	IPC-TM-650.2.4.41
Decomposition Temperature (5% wt loss)	°C	TGA	350	IPC-TM-650.2.3.40
T-260	min	TMA	120	IPC-TM-650.2.4.24.1
T-288	min	TMA	10	IPC-TM-650.2.4.24.1
Dielectric Constant (Resin Content 50%)		C-24/23/50 (1GHz)	4.3	IPC-TM-650.2.5.5.9
Dissipation Factor (Resin Content 50%)		C-24/23/50 (1GHz)	0.016	IPC-TM-650.2.5.5.9
Peel Strength (Standard profile 1oz)	N/mm	Condition A	1.7	IPC-TM-650.2.4.8
Water Absorption	%	E-24/50+D-24/23	0.15	IPC-TM-650.2.6.2.1

\*IPC-C4101C/21,24,26,28,121,124,129