

LI2000 Reliability Testing Report

1. RA test

Procedure

Tested for thermal resistance using a ASTM D5470 at different condition (room temperature, aging 80 °C, HAST and thermal shock).

1.1 Room temperature @ 25°C

1.2 Thermal Aging @ 80°C (200 hrs, 400 hrs, 700 hrs, 1000 hrs)

1.3 Thermal HAST @ 85°C/85%RH (200 hrs, 400 hrs, 700 hrs, 1000 hrs)

1.4 Thermal Cycling @ -40°C to 120°C for 500 cycles (100 cycles, 200 cycles, 300 cycles, 400 cycles, 500 cycles)

During testing and aging, the samples were maintained between two round aluminum disks of one square inch in surface area.

During Aging, clamps were used to hold a constant pressure on the sample.

Results

Code/(Unit : □-in ² /W)	0 hr	200 hrs	400 hrs	700 hrs	1000 hrs
Room temperature	0.636	-	-	-	-
Thermal Aging	0.636	0.638	0.642	0.646	0.651
Thermal HAST	0.636	0.634	0.630	0.627	0.622

Code/(Unit : °C-in ² /W)	100 cycles	200 cycles	300 cycles	400 cycles	500 cycles
Thermal Cycling	0.637	0.639	0.642	0.641	0.639

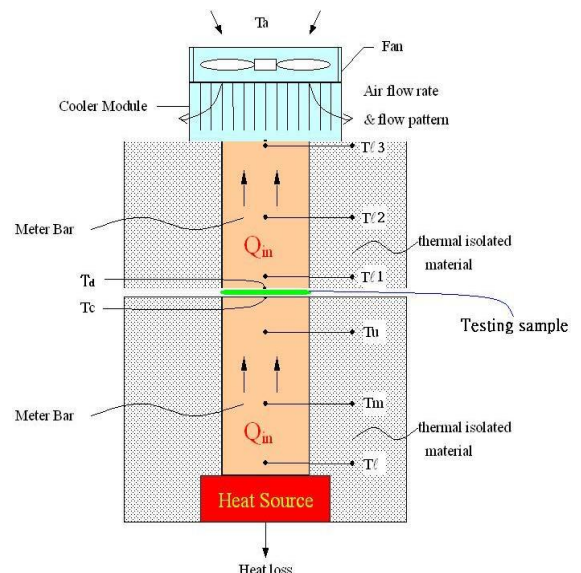
Test method : ASTM D5470

Heat power : 30W

Specimen Area: 1 inch²

Specimen thickness: 0.15 mm, n=5

Specimen area: 1 inch²



LI2000 Reliability Testing Report

2. Static Shear Test

Procedure:

PSTC-7 for adhesively bonded test

Results

Code	Room temperature @ Holding 1000 g	80°C @ Holding 1000 g
0.15 mm	>10000 min	>10000 min

Note:

The data for design engineer guidance only.

Engineers are reminded to test the material in varies application.

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Results

Code/(Unit : □-in ² /W)	0 hr	200 hrs	400 hrs	700 hrs	1000 hrs
Room temperature	1.074	-	-	-	-
Thermal Aging	1.074	1.076	1.079	1.084	1.088
Thermal HAST	1.074	1.070	1.067	1.065	1.061

Code/(Unit : °C-in ² /W)	100 cycles	200 cycles	300 cycles	400 cycles	500 cycles
Thermal Cycling	1.077	1.079	1.083	1.084	1.083

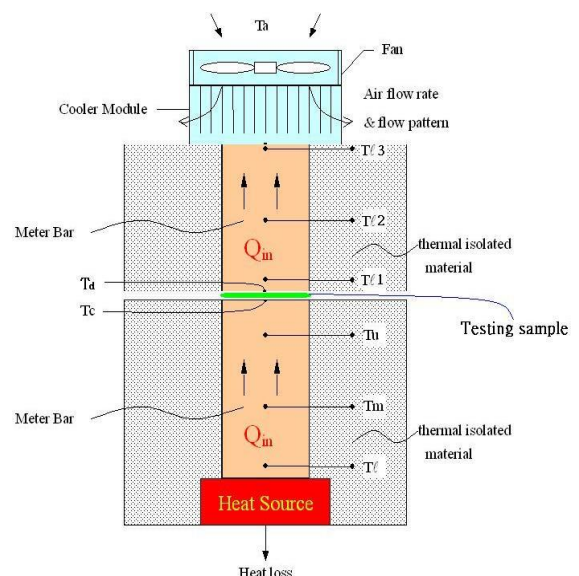
Test method : ASTM D5470

Heat power : 30W

Specimen Area: 1 inch²

Specimen thickness: 0.25 mm, n=5

Specimen area: 1 inch²



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