

**Terminal block (PCB mount)**

**1. INTRODUCTION**

1.1 Purpose

Testing was performed on terminal block (PCB mount) to determine its effects of thermal stresses related to the requirements of specification IEC 60335-2013, IEC 60695-2-11-2014.

1.2 Scope

This report covers the effects of thermal stresses performance of terminal block (PCB mount). Testing was performed at the Shanghai Electrical Components Test Laboratory between Nov. 30<sup>th</sup>, 2015 and Dec. 1<sup>st</sup>, 2015. The associated test number is TP-15-02671.

1.3 Conclusion

Based on the test results, all tests meet the requirement according to specification IEC 60335-2013, IEC 60695-2-11-2014.

1.4 Test Specimens

Specimens with the following part numbers were used for test:

Table 1

Part No.	Description	Qty. (pcs)	Comments
282844-2	TERMINAL BLOCK, PCB MOUNT, SIDE WIRE ENTRY, STACKING, WITH INTERLOCK, 7.5mm	9	\



Fig.1 Typical Specimen

1.5 Test Sequence

The specimens listed in Table 1 were subjected to the test sequences listed in Table 2.

Table 2

Test Item	Test Group(a)
	1
Glow wire test	Test Sequence (a)
	1

Note: a). Numbers indicate sequence in which tests are performed.

1.6 Environmental Conditions

Unless otherwise stated, the following environmental conditions prevailed during testing:

Temperature: 15°C to 35°C  
 Relative Humidity: 25% to 75%

2. TEST PROCEDUES

2.1 Glow wire test

Assembly sample on fixture, then start test at the specific temperature (750 °C and 850 °C) for 30 seconds. Check the parameters in Spec. required.

Requirement: No flame or  $T_e - T_i \leq 2s$  (750 °C);

No flame or  $T_e \leq T_a + 30s$  (850 °C)

Test Method: IEC 60335-2013, IEC 60695-2-11-2014.

3. SUMMARY OF TESTING

Group	Test Item			Test Result				Requirement	Conclusion
				T <sub>i</sub> (sec)	T <sub>e</sub> (sec)	Flame height (mm)	Drops		
1	Glow wire test	750 °C	A	0	0	0	No	No flame or $T_e - T_i \leq 2s$	Meet Spec
			A	0	0	0	No		Meet Spec
			A	0	0	0	No		Meet Spec
			B	0	0	0	No		Meet Spec
			B	0	0	0	No		Meet Spec
			B	0	0	0	No		Meet Spec
		850 °C	C	0.4	5.0	20	No	No flame or $T_e \leq T_a + 30s$	Meet Spec
			C	1.3	31.3	40	No		Meet Spec
			C	1.0	14.0	30	No		Meet Spec

\*Note:  $T_a = 30 s \pm 1 s$

4. CALIBRATION

4.1 Calibration Statement

All equipment containing a calibration number is calibrated and traceable through TE Connectivity (TE).

5. VALIDATION

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