

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. 30th, 2015 and Dec. 1st, 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 PROCEDURES

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
				Ti (sec)	Te (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

Requested by:

Prashanth, Surathkal 2015 10 27
_____/_____/____

Product Engineer

TE Connectivity India product engineer

Prepared by:

Cynthia Wang 2020 08 05
_____/_____/____



Test Engineer
Shanghai Electrical Components Test Lab.

Approved by: Coco Xu 2020 08 05
_____ / _____ / _____

Manager
Shanghai Electrical Components Test Lab.