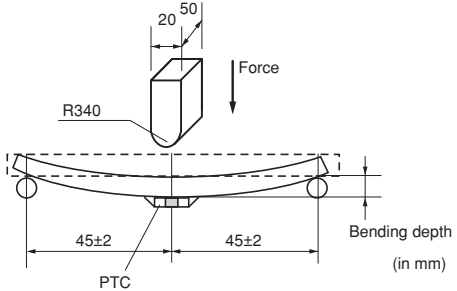



No.	Item	Rating Value	Mention of Examination
1	Operating Temp. Range	-40 to +105°C	Temperature range that permit to apply max. voltage to the Posistor®.
2	Storage Temp. Range	-40 to +125°C	Temperature range that permit to leaving without applying power to the Posistor®.
3	Resistance Value at 25°C	Within the specified range.	It is measured by below flow. 1) Applied max. voltage for 3min. 2) Storage 2hrs in room temperature 3) Measured by four-terminal method with less than 10mA (DC 0.1V)
4	Shear Test	<ul style="list-style-type: none"> • Resistance (R25) change: Less than $\pm 20\%$ *1 • Appearance: No defects or abnormalities 	Reference standard: IEC 60068-2-21 (1999) <ul style="list-style-type: none"> • Solder PTC to PCB *2 • Test board: Grass-Epoxy test board (FR-4) with our standard land size • Pushing force: 10N • Keep time: 10\pm1 sec.
5	Vibration		Reference standard: IEC 60068-2-6 (1995) <ul style="list-style-type: none"> • Solder PTC to PCB *2 • Frequency range: 10 to 55Hz • Amplitude: 1.5mm • Sweep rate: 1 octave/min. • Direction: X-Y-Z (3 direction) • 24 cycles in each axis
6	Bending Test		Reference standard: IEC 60068-2-21 (1999) <ul style="list-style-type: none"> • Solder PTC to PCB *2 Board dimension: 100x40x1.6mm (Grass epoxy board) • Bending speed: 1.0mm/s • Bending depth: 1.0mm • Keep time: 5\pm1 sec. 
7	Solderability	Wetting of soldering area: $\geq 75\%$	Reference standard: IEC 60068-2-58 (2004) <ul style="list-style-type: none"> • Solder: Sn-3.0Ag-0.5Cu • Solder temp.: 245\pm5°C • Immersion time: 3\pm0.3s

*1: The resistance value after the test is measured by 4-terminal method with less than 10mA (DC0.1V), after storage in 25 \pm 2°C for 2hrs.

*2: Above-mentioned soldering is done following condition at our side.

- Glass-epoxy PC board
- Standard land dimension
- Standard solder paste
- Standard solder profile

Above conditions are defined in Notice.

Continued on the following page. 

Continued from the preceding page.

No.	Item	Rating Value	Mention of Examination									
8	Resistance to Soldering Heat		Reference standard: IEC 60068-2-58 (2004) [Reflow Method] • Solder: Sn-3.0Ag-0.5Cu • Preheat: +150 to +180°C, 120±5s • Peak temp.: 260±5°C • Soldering time: >220°C, 60 to 90s • Reflow cycle: 2 times • Test board: Glass-Epoxy test board (FR-4) with our standard land size									
9	High Temperature Storage		Reference standard: IEC 60068-2-2 (2007) • Solder PTC to PCB *2 • +125±2°C • 1000+48/-0 hrs.									
10	Low Temperature Storage		Reference standard: IEC 60068-2-1 (2007) • Solder PTC to PCB *2 • -40±3°C • 1000+48/-0 hrs.									
11	Damp Heat, Steady State	• Resistance (R25) change: Less than ±20% *1 • Appearance: No defects or abnormalities	Reference standard: IEC 60068-2-67 (1995) • Solder PTC to PCB *2 • +85±2°C, 85±5%RH • 1000+48/-0 hrs.									
12	Thermal Shock *3		Reference standard: IEC 60068-2-14 (2009) [Test Na] • Solder PTC to PCB *2 • Transport time: <10 sec. • Test condition: See below table <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Step</th> <th>Condition</th> <th>Soaking Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-40±3°C</td> <td>30 min.</td> </tr> <tr> <td>2</td> <td>+125±2°C</td> <td>30 min.</td> </tr> </tbody> </table> • Test cycle: 1000cycles	Step	Condition	Soaking Time	1	-40±3°C	30 min.	2	+125±2°C	30 min.
Step	Condition	Soaking Time										
1	-40±3°C	30 min.										
2	+125±2°C	30 min.										
13	High Temperature Load		Reference standard: IEC 60068-2-2 (2007) • Solder PTC to PCB *2 • +105±2°C • Applied max. voltage • 1000+48/-0 hrs.									
14	Damp Heat Load		Reference standard: IEC 60068-2-67 (1995) • Solder PTC to PCB *2 • +85±2°C, 85±5%RH • Applied max. voltage • 1000+48/-0 hrs.									

*1: The resistance value after the test is measured by 4-terminal method with less than 10mA (DC0.1V), after storage in 25±2°C for 2hrs.

*2: Above-mentioned soldering is done following condition at our side.

- Glass-epoxy PC board
- Standard land dimension
- Standard solder paste
- Standard solder profile

Above conditions are defined in Notice.

*3: We cannot guarantee the resistance change in Thermal Shock in a case of defective mounting.