No.	Item	Rating Value	Method of Examination
1	Operating Temp. Range	-10 to +60°C	Temperature range that permit to apply max. voltage to the Posistor®.
2	Resistance Value at 25°C	Within the specified range	It is measured by below flow. 1) Applied max. voltage for 3 min. 2) Storage 2 hrs in room temperature 3) Measured by four-terminal method with less than 1mA (DC0.1V).
3	Withstanding Voltage	Without damage	The voltage which rises gradually to 120% of the max. voltage applies to the Posistor® for 180±5 sec. at 25°C. (A protective resistor is to be connected in series, and the inrush current through Posistor® must be limited below max. rated value.)
4	Vibration	• Resistance (R25) change: Less than ±20% *1 • Appearance: No defects or abnormalities	Reference standard: IEC 60068-2-6 (1995) • Soldered 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
5	Solderability	Wetting of soldering area: ≧75%	Reference standard: IEC 60068-2-58 (2004) • Solder: Sn-3.0Ag-0.5Cu • Solder temp.: 245±5°C • Immersion time: 3±0.3 s
6	Resistance to Soldering Heat	• Resistance (R25) change: Less than ±20% *1 • Appearance: No defects or abnormalities	Reference standard: IEC 60068-2-58 (2004) [Reflow method] • Solder: Sn-3.0Ag-0.5Cu • Preheat: +150 to +180°C, 120±5 s • Peak temp.: 260±5°C • Soldering time: >220°C, 60 to 90 s • Reflow cycle: 1 time • Test board: Grass-Epoxy test board (FR-4) with our standard land size *2
7	High Temperature Storage		Reference standard: IEC 60068-2-2 (2007) • Soldered PTC to PCB *2 • +60±2°C • 1000+48/-0 hrs.
8	Low Temperature Storage		Reference standard: IEC 60068-2-1 (2007) • Soldered PTC to PCB *2 • -10±3°C • 1000+48/-0 hrs
9	Damp Heat, Steady State		Reference standard: IEC 60068-2-67 (1995) • Soldered PTC to PCB *2 • +40±2°C, 90±5%RH • 500+24/-0 hrs
10	Thermal Shock *3		Reference standard: IEC 60068-2-14 (2009) [Test Na] • Soldered PTC to PCB *2 • Transport time: <10 sec. • Test condition: See below table • Test cycle: 5 cycles
11	High Temperature Load		Reference standard: IEC 60068-2-2 (2007) • Soldered PTC to PCB *2 • +60±2°C • Applied max. voltage • 1000+48/-0 hrs.

Step	Condition (°C)	Time (min.)
1	-20±3	30
2	+85±3	30

*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 2 hrs.
*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 mentioned in Notice.
*3: We cannot guarantee the resistance change in Thermal Shock in case of defective mounting.

(Note)
No.11 High Temperature Load is based on Glass-Epoxy PC board which thermal dissipation coefficient of a mounting state is 2.2mW/°C.
In other condition of 2.2mW/°C, High Temperature Load characteristics may change.