No.	Item	Rating Value	Method of Examination
1	Resistance Value (at 25°C)	The resistance value should be within the specified tolerance.	After applying maximum operating voltage for 3 minutes and leaving for 2 hours at 25°C, measured by applying voltage of less than 1.5Vdc (by a direct current of less than 10mA).
2	Adhesive Strength	There is no detachment sign of electrode.	EIAJ ET-7403 term 9 Prepare soldered PTC to PCB *1 and add the force of 5.0N in the direction shown below. (PTC=POSISTOR®) PTC F Glass Epoxy PCB
3	Vibration Resistance	Normal appearance Resistance change: not to exceed ±20%*2	Soldered PTC to PCB*1 Vibration: 10-2000-10Hz (20 minutes) Max. Amplitude: 3.0mm Vibrate for 4 hours in each of 3 mutually perpendicular planes for a total of 12 hours. This test condition is according to "MIL-STD- 204D"
4	Resistance to Bending of Substance	Normal appearance Resistance change: not to exceed ±20%*2	Soldered PTC on Test Board*1, and apply force on back side of Test Board shown below: Bending Speed: 1.0mm/s Bending Strength: 2.0mm Hold time: 5±1 seconds Board Dimension: 100 × 40 × 1.6t mm Board Material: Glass Epoxy
5	Solderability	Min. 95% electrode is covered with new solder. Resistance change: not to exceed ±20%*2	JIS C 5102 term 8.4 Solder temp.: 230±5°C Solder: Sn63%/Pb37% (or 60%/40%) Soaking time: 3±0.5 seconds Soaking position: Until a whole electrode is soaked
6	Soldering Heat Resistance	Resistance change: not exceed ±20%*2 Normal appearance on the section showed by slanting line parts of the electrodes on the figure. Electrode PTC	Solder temp.: 260±5°C Solder: Sn63%/Pb37% (or 60%/40%) Flux: Containing less than 0.2wt% of chlorine. Soaking time: 10±0.5 seconds Soaking position: Until a whole electrode is soaked. Preheating: 150±5°C 3 minutes
7	Dry Heat Resistance		Soldered PTC to PCB*1 +150±3°C leave for 1000±12 hours
8	Cold Resistance		Soldered PTC to PCB*1 -40±3°C leave for 1000±12 hours
9	Damp Heat Resistance		Soldered PTC to PCB*1 +85±3°C 80-85%RH leave for 1000±12 hours
10	Thermal Shock*3	Normal appearance Resistance change: not to exceed ±20%*2	Soldered PTC to PCB*1 Cycles: 1000 cycles Step Temp. (°C) Time (minutes) 1 -55+0, -3 30 2 +125+3, -0 30
11	High Temperature Humidity Load		Soldered PTC to PCB*1 85±3°C, 80-85%RH (in air), load max. operating voltage for 1000±12 hours

Continued on the following page.



Continued from the preceding page.

No	. Item	Rating Value	Method of Examination
12	High Temperature Load	Normal appearance Resistance change: not to exceed ±20%*2	Soldered PTC to PCB*1 +85±3°C (in air), load max. operating voltage for 1000±12 hours.

*1 Above mentioned soldering is done under the following conditions at our site.

Glass-Epoxy PC board

Standard land dimension

Standard solder paste

Standard solder profile

Above conditions are mentioned in Notice.

*2 Measure resistance after the test by applying voltage of less than 1.5Vdc by a direct current of less than 10mA after product is left at 25±2°C for 2 hours.

*3 We cannot guarantee the resistance change in Thermal Shock (No.10) in case of defective mounting.

