## ■16V Series

No.	Item	Rating Value	Method of Examination
1	Operating Temperature	-30 to +85°C	The temperature range with maximum voltage applied to the POSISTOR®.
2	Resistance (R25)	Satisfies specification	Resistance value is measured by applying voltage under 1.5Vdc (by a direct current of less than 10mA) at 25°C. (But it must be measured after maximum voltage is applied 180 seconds and then is left for 2 hours at 25°C.)
3	Withstanding Voltage	No damage	We apply AC voltage 110% that of the maximum voltage to POSISTOR® by raising voltage gradually for 180±5 seconds at 25°C. (A protective resistor is to be connected in series, and the inrush current through POSISTOR® must be limited below maximum rated value.)
4	Protective Threshold Current	Satisfies ratings (Trip Current, Non-operating Current)	Maximum current is measured in this examination. Voltage is applied to POSISTOR® in 3-minute steps still air. Stable current is measured at each step.
5	Tensile Strength of Lead Wire Terminal	No damage	The load is gradually applied to each terminal of POSISTOR® until the force of 4.9N in the axial direction with fixing POSISTOR®'s body itself by a jig and this load is being kept for 10 seconds.
6	Bending Strength of Lead Wire Terminal	Lead wire does not come off	POSISTOR® is held so that it is perpendicular to the lead wire with 2.45N in the axial direction of the lead wire. The lead wire is slowly bent to 90° and returned; then it is slowly bent in the opposite direction and returned to original state.
7	Solderability	Solder is applied around the lead wire covering 3/4 or more of the circumference without a gap in the axial direction.	The lead wire of POSISTOR® is soaked in an Isopropyl Alcohol (JIS K 8839) solution (about 25wt%) of colophony (JIS K 5902) for 5-10 seconds. Then, each lead wire is soaked in molten solder (JIS Z 3282 H60A) at 235±5°C from the bottom to a point of 2.0-2.5mm for 2±0.5 seconds.
8	Terminal Durability of Soldering	ΔR/R25≦±15%	The lead wire of POSISTOR® is soaked in molten solder (JIS Z 3282 H60A) at 350±10°C from the bottom to a point of 2.0-2.5mm for 3.5±0.5 seconds.  After the device is left at room temperature (25°C) for 24±4 hours, the resistance is measured.
9	Heat Resistant	ΔR/R25≦±20% No damage about marking	In an 85±3°C chamber, POSISTOR® is applied max. voltage for 1.5 hr on and 0.5 hr off. This cycle is repeated for 500±10 hours, and after the device is left at room temperature (25°C) for 1 hour, the resistance measurement is performed. (A protective resistance is to be connected in series and the inrush current through POSISTOR® must be limited below max. rated value.)
10	Resistance to Damp Heat	ΔR/R25≦±20% No damage about marking	POSISTOR® is set in an environmental chamber at 40±2°C and 90% to 95% humidity, for 500±4 hours.  Then, after the device is left at room temperature (25°C) for 1 hour, the resistance measurement is performed.