

Power Inductors — Performance Specifications

General

Item		Specification
1	Shelf Storage Conditions	Temperature : $25 \pm 3^{\circ}\text{C}$ Humidity : <80%
2	Storage Temperature Range	-40°C to $+85^{\circ}\text{C}$
3	Operating Temperature Range	-20°C to $+80^{\circ}\text{C}$

Mechanical Performance

Item	Specification	Test Method
1	Solderability Test	90% covered with solder MIL-STD-202F Method 208H Inductor shall be dipped in a melted solder bath at $230 \pm 5^{\circ}\text{C}$ for 5 secs.
2	Heat endurance of reflow soldering	Go through 3 times
3	Vibration	No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta L/L \leq 30\%$ (PS1608) Applied Frequency: 10~55Hz Amplitude: 1.5mm Time: 2 hours In each perpendicular direction
4	Shock resistance	Conduct drop testing once for each of three orientations

Climatic Tests

Item	Specification	Test Method
1	High Temperature Storage test	Temperature : $85 \pm 2^{\circ}\text{C}$ Time : 48 ± 2 hrs Measured after 1hr at room temperature
2	Low Temperature Storage Test	Temperature : $-25 \pm 2^{\circ}\text{C}$ Time : 48 ± 2 hrs Measured after 1hr at room temperature
3	Humidity Test	No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta L/L \leq 30\%$ (PS1608) Temperature : $85 \pm 2^{\circ}\text{C}$ Relative Humidity : 90 ~ 95% Time : 96 ± 2 hrs Load : Rated IDC Measured after 1hr at room temperature
4	Thermal Shock	Step1: -25°C for 30mins Step2: 25°C for 10mins Step3: 85°C for 30 mins Complete 5 cycles Measured after 1hr at room temperature