

■ Test and Measurement Conditions

<Unless otherwise specified>

Temperature: Ordinary Temp. 15 to 35°C
 Humidity: Ordinary Humidity 25 to 85% (RH)

<In case of doubt>

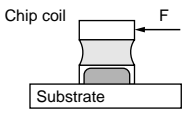
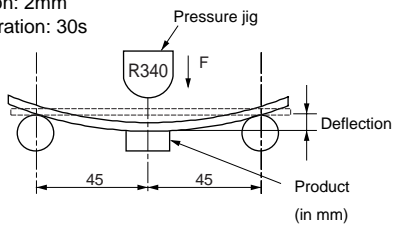
Temperature: 20±2°C
 Humidity: 60 to 70% (RH)
 Atmospheric Pressure: 86 to 106kPa


■ Specifications

1. Electrical Performance

No.	Item	Specifications	Test Methods
1	Inductance	Meet rating table above.	Measuring Equipment: YHP4192A or the equivalent Measuring Frequency: 1MHz
2	DC Resistance		Measuring Equipment: Digital multi-meter
3	Self Resonant Frequency (S.R.F)		Measuring Equipment: HP4291A or the equivalent
4	Rated Current	Self temperature rise shall be limited to 20°C max. Inductance Change: within ±10%	The rated current is applied.

2. Mechanical Performance

No.	Item	Specifications	Test Methods
1	Appearance and Dimensions	Meet Dimensions.	Visual Inspection and measured with micrometer.
2	Solderability	The electrodes should be at least 90% covered with new solder coating.	Flux: Ethanol solution of rosin, 25(wt)% (Immersed for 5 to 10s) Pre-Heating: 150±10°C, 60 to 90s Solder: (1) Sn/Pb=60/40 (2) Sn-3.0Ag-0.5Cu Solder Temperature: (1) 230±5°C (2) 240±5°C Immersion Time: (1) 4±1s (2) 3±1s
3	Resistance to Soldering Heat	Appearance: No damage Inductance Change: within ±5%	Flux: Ethanol solution of rosin, 25(wt)% (Immersed for 5 to 10s) Solder: Sn/Pb=60/40 or Sn-3.0Ag-0.5Cu Pre-Heating: 150±10°C, 60 to 90s Solder Temperature: 270±5°C Immersion Time: 10±1s Then measured after exposure to room conditions for 24±2 hrs.
4	Shear Test	Chip coil shall not be damaged.	Substrate: Glass-epoxy substrate Applied Direction:  Applying Force: 10N Hold Duration: 5±1s
5	Bending Test		Substrate: Glass-epoxy substrate (100 × 40 × 1.6mm) Speed of Applying Force: 1mm/s Deflection: 2mm Hold Duration: 30s 
6	Vibration		Oscillation Frequency: 10 to 2000 to 10Hz for 20 min. Total Amplitude: 1.5mm or Acceleration amplitude 196m/s ² whichever is smaller. Testing Time: A period of 2 hours in each of 3 mutually perpendicular directions. (Total 6 hours)

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3. Environmental Performance (It should be soldered on the substrate.)

No.	Item	Specifications	Test Methods
1	Heat Resistance	Appearance: No damage Inductance Change: within $\pm 5\%$ DC Resistance Change: within $\pm 5\%$	Temperature: $85\pm 2^{\circ}\text{C}$ Time: 1000hrs. ($\pm 4^{\circ}\text{hrs.}$) Then measured after exposure in the room condition for 24 ± 2 hrs.
2	Cold Resistance		Temperature: $-40\pm 2^{\circ}\text{C}$ Time: 1000hrs. ($\pm 4^{\circ}\text{hrs.}$) Then measured after exposure in the room condition for 24 ± 2 hrs.
3	Humidity		Temperature: $85\pm 2^{\circ}\text{C}$ Humidity: 80 to 85%(RH) Time: 1000hrs. ($\pm 4^{\circ}\text{hrs.}$) Then measured after exposure in the room condition for 24 ± 2 hrs.
4	Humidity Life		Temperature: $85\pm 2^{\circ}\text{C}$ Humidity: 80 to 85%(RH) Test Current: Rated Current Time: 1000hrs. ($\pm 4^{\circ}\text{hrs.}$) Then measured after exposure in the room condition for 24 ± 2 hrs.
5	Temperature Cycle		1 cycle: 1 step: $-40\pm 2^{\circ}\text{C}$, 30 ± 3 min. 2 step: Room Temperature/within 5 min. 3 step: $+85\pm 2^{\circ}\text{C}$, 30 ± 3 min. 4 step: Room Temperature/within 5 min. Total of 1000 cycles Then measured after exposure to room condition for 24 ± 2 hrs.