■ Feature

EIA 0402/EIAJ 1005 size
Closed magnetic structures to minimize crosstalk.
RoHS compliant.

■ Application

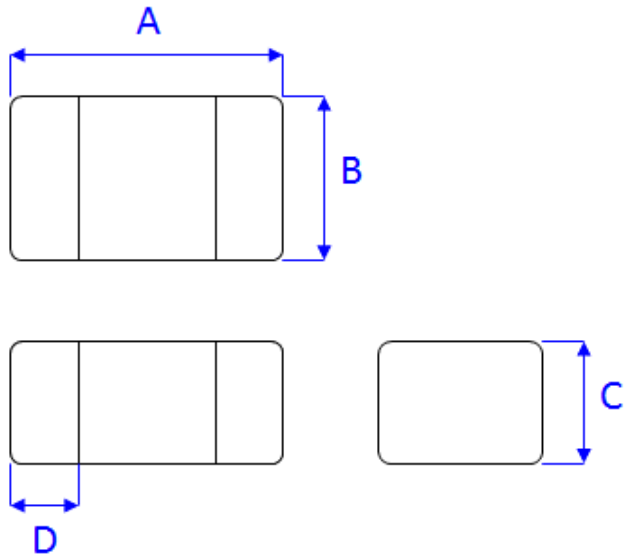
Noise suppression in electronic instruments such as computers and peripheral devices, personal computers, communication equipment, VCR and cameras etc.

■ Electrical Characteristics (Ta=25℃ unless otherwise specified)

Part Number	Impedance, (Z) ±25%, (Ω)	DC Resistance, (R_{DC}) Max, (Ω)	Rated Current , (I_{DC}) Max, (mA)
BS1005UA-100A05	10 @100MHz	0.05	500
BS1005UA-300A03	30 @100MHz	0.20	300
BS1005UA-600A05	60 @100MHz	0.15	500
BS1005UA-800A02	80 @100MHz	0.40	200
BS1005UA-121A05	120 @100MHz	0.20	500
BS1005UA-151A05	150 @100MHz	0.60	400
BS1005UA-221A01	220 @100MHz	0.70	100
BS1005UA-301A01	300 @100MHz	0.75	100
BS1005UA-471A01	470 @100MHz	0.90	100
BS1005UA-601A03	600 @100MHz	0.60	300
BS1005UA-102A03	1000 @100MHz	1.00	300
BS1005UA-152A01	1500 @100MHz	1.15	100

Note1. Test equipment : Z : Agilent E4991A, R_{DC} : HP4338
Note2. IDC : For 40℃ Temperature rise from 25℃ ambient.
Note3. Operating temperature : -55℃ ~ +125℃.

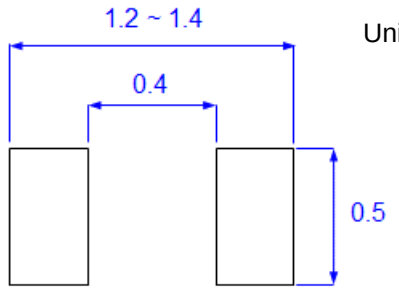
■ Package Outline



Unit: mm

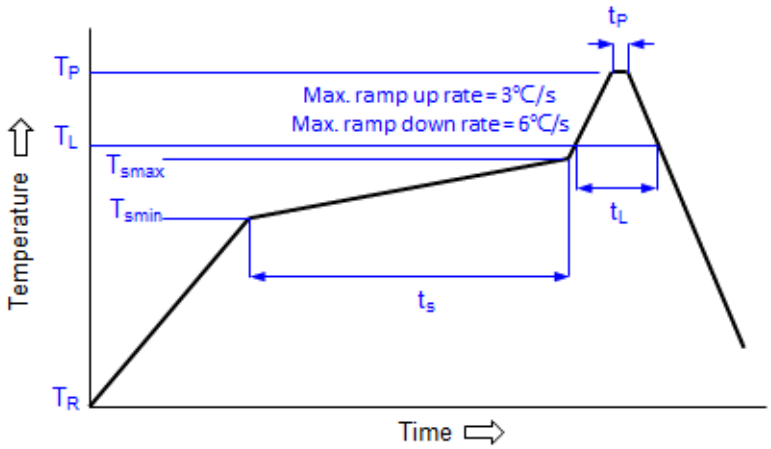
Symbol	Dimensions
A	1.00 ±0.05
B	0.50 ±0.05
C	0.50 ±0.05
D	0.20 ±0.10

■ Land Pattern (Reference)



Unit: mm

■ Recommended Reflow Profile for SMT components

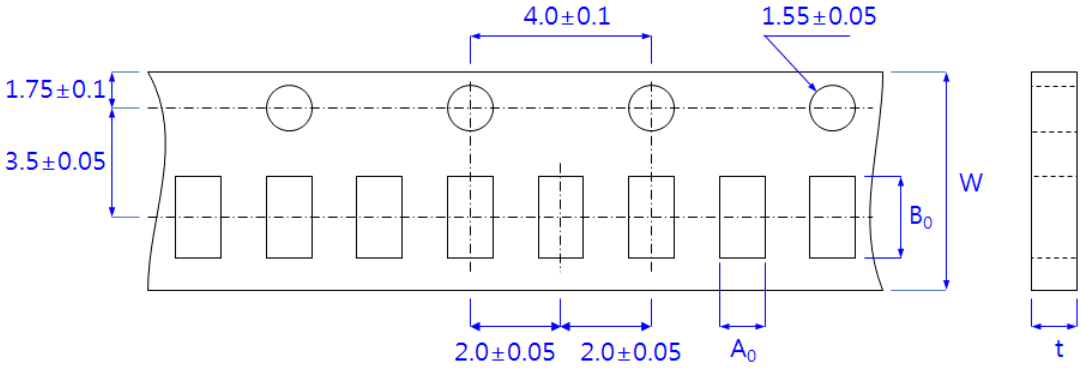


Profile feature	Pb-free assembly
Preheat	
- Temperature Min (T_{smin})	120°C
- Temperature Max (T_{smax})	180°C
- Time(t_s) from (T_{smin} to T_{smax})	50-150 seconds
Liquidous temperature (T_L)	230°C
Time (t_L) maintained above T_L	90-120 seconds
Peak temperature (Tp)	255±5°C
Time of peak temperature (tp)	10 seconds Max.

■ Reliability and Test Conditions

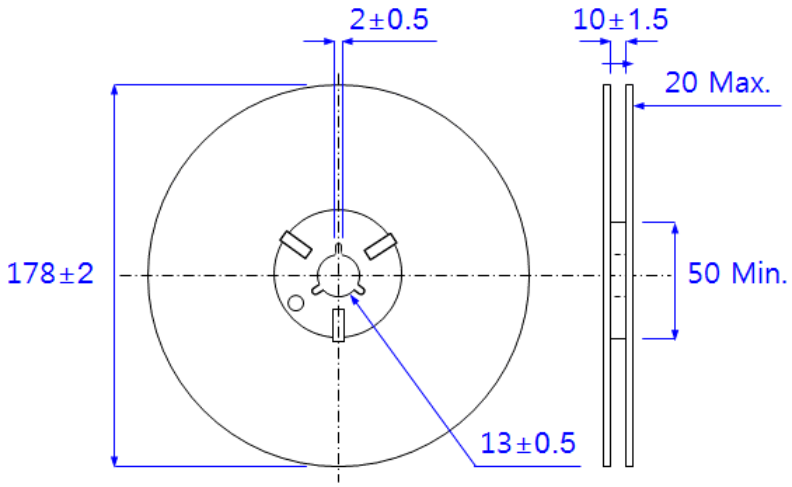
Item	Specification	Test conditions
Solder-ability	More than 75% of the terminal electrode part shall be covered with solder.	1.Solder temp.: 245±5℃ 2.Immersion time: 4±1 sec 3.Solder: Sn-3Ag-0.5Cu
Resistance to soldering heat	1.No visible damage 2.Electrical characteristics and mechanical characteristics shall be satisfied.	1.Solder Temp. : 260±3℃ 2.Immersion time : 6±1 sec 3.Preheating: 100℃~150℃, 1 minute. 4.Measurement to be made after keeping at room temp for 24±2 hrs. 5.Solder: Sn-3Ag-0.5Cu
High temperature test	1.Appearance: no mechanical damage 2.Impedance shall be with±30%of the initial value. 3.DC resistance shall be satisfied	1.Temperature125℃±2℃ 2.Testing time: 1008±12hrs 3.Measurement: After placing at room ambient temperature for 24 hours minimum
Low Temperature storage test	1.Appearance: no mechanical damage 2.Impedance shall be with±30% of the initial value. 3.DC resistance shall be satisfied	1.Temperature -55℃±2 2.Testing time: 1008±12hours 3.Measurement: After placing for 24 hours minimum at room ambient temperature.
Humidity	1.Appearance: no mechanical damage 2.Impedance shall be with±30%of the initial value. 3.DC resistance shall be satisfied	1.Humidity: 90 to 95%RH 2.Temperature: 40±2℃ 3.Testing time: 1008±12hours 4.Measurement: After placing at room ambient temperature for 24 hours minimum
Temperature Cycle	1.Appearance: no mechanical damage 2.Impedance shall be with±30%of the initial value. 3.DC resistance shall be satisfied	1.Temperature -55℃ ~ +125℃ kept stabilized for 30 minutes each. 2.Cycle: 100 cycles 3.Measurement: After placing for 24 hours minimum at room ambient temperature 4.step1.-55℃±3℃, 30±3 minutes step2.Standard atmospheric conditions ≦5s step3.+125℃±2℃, 30±3 minutes step4.Standard atmospheric conditions ≦5s
Thermal Shock	1.Appearance: no mechanical damage 2.Impedance shall be with±30%of the initial value.	1.Temperature -55℃ ~ +125℃, kept stabilized for 30 minutes each 2.Cycle: 100 cycles 3.Measurement: After placing for 24 hours minimum at room ambient temperature
Vibration	1.Appearance: no mechanical damage 2.Impedance shall be with±30%of the initial value.	1.Waveform: Sine wave 2.Frequency: 10~55~10 Hz 3.Sweep time: 1min 4.Amplitude: 1.5mm(peak-peak) 5.Direction: X, Y, Z(3 axes) 6.Duration: 2 hrs. /axis, total 6 hrs.

■ Tape Dimensions (unit: mm)



A_0	B_0	t	W
0.62±0.05	1.12±0.05	0.60±0.05	8.00±0.10

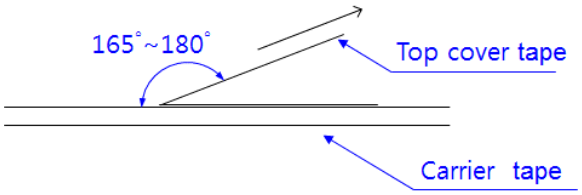
■ Reel Dimensions (unit: mm)



■ Packaging Quantity

10,000pcs/reel

■ Cover Tape peel strength



The force for tearing off cover tape is 10g~100g in the arrow direction at the following conditions.

Peel angle	Peel speed
165°~180°vs carrier tape	300mm/min