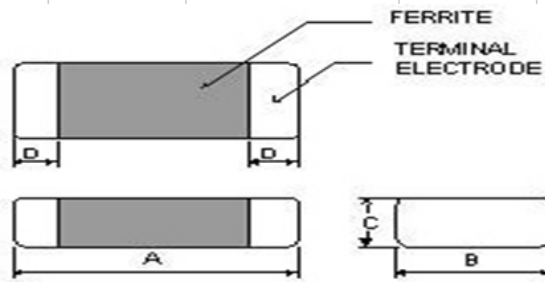
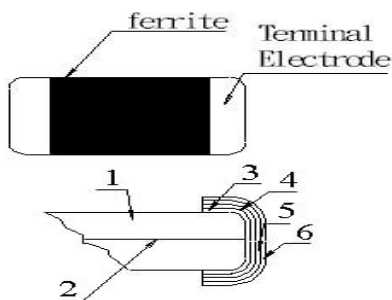


### 1. External Dimensions (Unit:m/m)



TYPE	METRIC	A	B	C	D	Q'Ty/Reel
AIC201209	0805	2.0±0.2	1.25±0.2	0.9±0.2	0.5±0.3	4000

### 2. Construction:



NO	PART	MATERIAL
1	Ferrite Substance	NiO-CuO-ZnO-Ferrite
2	Silver electrode	Ag
3	Silver electrode	Ag
4	Cu plating	Cu
5	Ni plating	Ni
6	Sn plating	Sn

### 3. Part Number Code

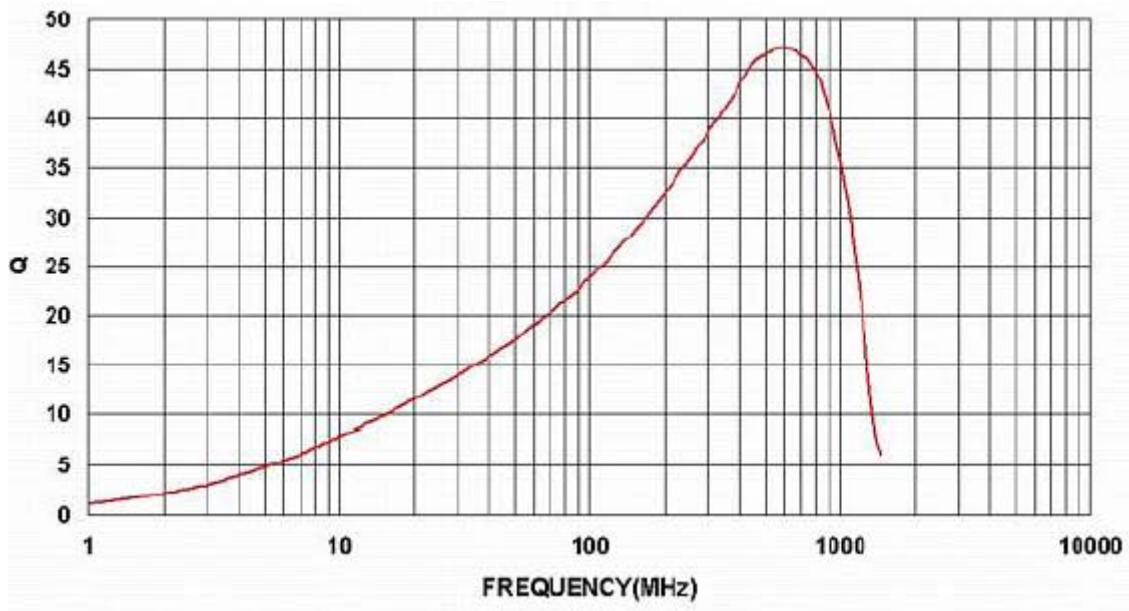
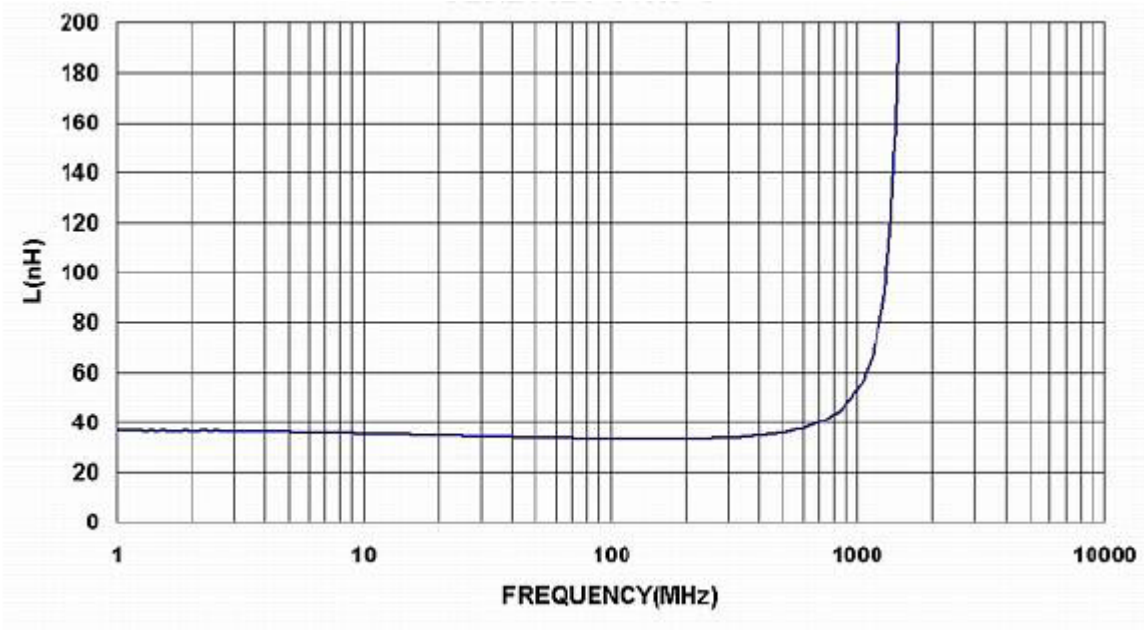
AIC    201209    J    33N  
 A        B            C        D

A: Series Name                      Multilayer Ceramic Chip Inductors  
 B: Dimensions(mm)                201209: 0805  
 C: Tolerance                            J: ±5%  
 D: Inductance                           33N=33nH

### 4. Electrical Characteristics


Part Number	Inductance (nH)	L,Q Test Freq (MHz)	Q Min.	S R F (MHz)Min.	R D C (Ω)Max.	I D C (mA)Max.	Tolerance
AIC201209J33N	33.0	100 MHz/ 250 mV	15.0	1200.0	0.6	300.0	±5%

### 5. Curve



### 6. Reliability Test

#### 6.1 Mechanical Performance

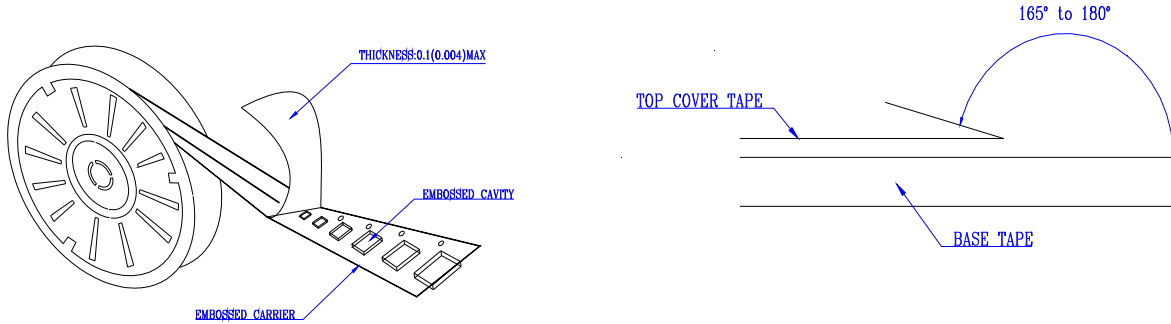
Item	Specifications	Test conditions
Flexure Strength	The forces applied on the right conditions must not damage the terminal electrode and the ferrite	Test device shall be soldered on the substrate Substrate Dimension: 100x40x0.8mm Deflection: 2.0mm Keeping Time: 30sec 
Vibration		Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs
Resistanc to Soldering Heat	Appearance: No damage	Pre-heating: 150°C, 1min Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free) Solder Temperature: 260±5°C Immersion Time: 10±1sec
Solder ability	The electrodes shall be at least 90% covered with new solder coating	Pre-heating: 150°C, 1min Solder Temperature: 220±5°C Solder Composition: Sn/Ag3.0/Cu0.5(Pb-Free) Solder Temperature: 245±5°C Immersion Time: 4±1sec

#### 6.2 Environmental Performance

Item	Specifications	Test conditions																		
Temperature Cycle	Appearance: No damage Impedance: within±10% of initial value Qchange: within±30% of initial value	<table border="1"> <thead> <tr> <th colspan="3">One cycle:</th> </tr> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25±2</td> <td>3</td> </tr> </tbody> </table> Total: 100cycles Measured after exposure in the room condition for 24hrs	One cycle:			Step	Temperature (°C)	Time (min)	1	-25±3	30	2	25±2	3	3	85±3	30	4	25±2	3
One cycle:																				
Step		Temperature (°C)	Time (min)																	
1		-25±3	30																	
2	25±2	3																		
3	85±3	30																		
4	25±2	3																		
Humidity Resistance	Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs																			
High Temperature Resistance	Temperature: 85±3°C / Relative Humidity: 20% Applied Current: Rated Current /Time: 1000hrs Measured after exposure in the room condition for 24hrs																			
Low Temperature Resistance	Temperature: -25±3°C Relative Humidity: 0%/Time: 1000hrs Measured after exposure in the room condition for 24hrs																			

### 7. PACKAGING

#### 7.1 Packaging -Cover tape

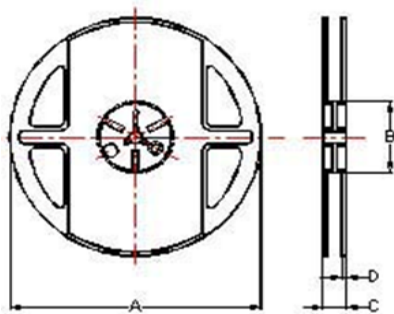


The force for tearing off cover tape is 10 to 60 grams in the arrow direction.

#### 7.2 Packaging Quantity

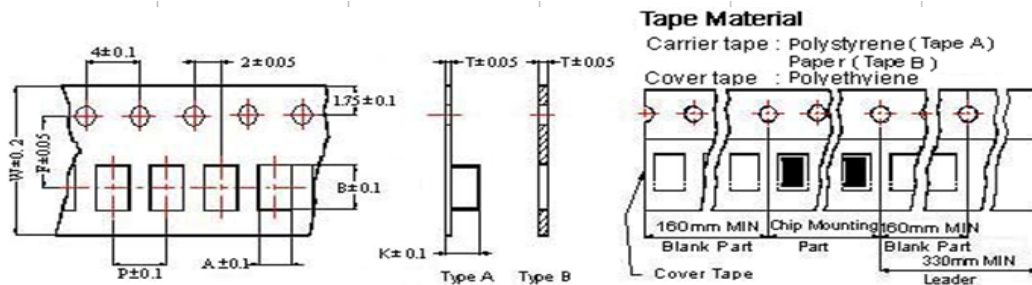
TYPE	METRLC	BULK
AIC100505	0402	10000
AIC160808	0603	4000
AIC201209	0805	4000

#### 7.3 Reel Dimensions (Unit:m/m)



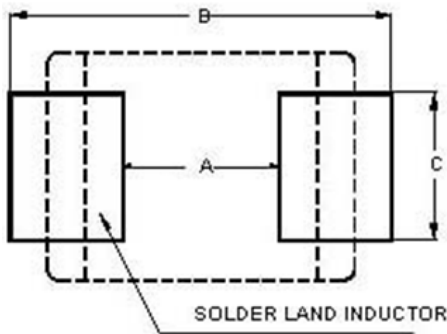
TYPE	A	B	C	D
AIC100505	178	60	12	1.5
AIC160808	178	60	12	1.5
AIC201209	178	60	12	1.5

### 7.4 Tape Dimensions in mm



TYPE	A	B	T	W	P	F	K	Tape Type
100505	0.65	1.15	0.60	8.00	2.00	3.50	◆	B
160808	1.10	1.85	0.95	8.00	4.00	3.50	◆	B
201209	1.58	2.42	0.95	8.00	4.00	3.50	◆	B
201212	1.35	2.25	0.22	8.00	4.00	3.50	1.35	A
321611	1.88	3.50	0.22	8.00	4.00	3.50	1.27	A
321616	1.88	3.53	0.22	8.00	4.00	3.50	1.80	A
322513	2.77	3.42	0.22	8.00	4.00	3.50	1.55	A
451616	1.93	4.95	0.24	12.00	4.00	5.50	1.93	A
453215	3.66	4.95	0.24	12.00	8.00	5.50	1.85	A

### 7.5 Recommended Pattern



TYPE	A	B	C
100505	0.40	1.2~1.4	0.40
160808	0.80	2.4~3.4	0.60
201209	1.20	3.0~4.0	1.00
201212	1.20	3.0~4.0	1.00
321611	2.00	4.2~5.2	1.20
321616	2.00	4.2~5.2	1.20
322513	2.00	5.5~6.5	1.80
451616	3.00	5.5~6.5	1.20
453215	3.00	5.5~6.5	2.40

### 7.6 Note

- A. Please make sure that your product is has been evaluated and confirmed against your specifications when our product is mounted to your product.
- B. Do not knock nor drop.
- C. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.

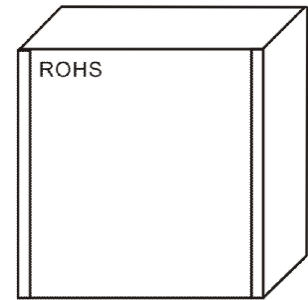
### 7.6 Packaging

7.6.1 The inner box specification: 195\*192\*65MM

Packing quantity 20000PCS/ box

Sealing bag : 32\*23CM

Job description: putting the air Sealing bag products placed inside the box, sealed with scotch tape



7.6.2 The outside box specification: 410\*405\*165MM

Packing quantity: 160000PCS/ box.

Job description: will be outside the box bottom sealed, inner box into the box.

- a. With transparent tape sealed box at the top.
- b. The specified location with a box labels in the outer box.
- c. If the mantissa box under a FCL with inner box or filling full.

