

SPECIFICATION

FOR

APPROVAL

Customer : _____

Description : Piezo Buzzer

Universal Model No. : UGPT16BM4012P

Universal ERP No. : UGPT16BM4012P03

Customer's Model No. : _____

ISSUE	CHECK	APPROVAL	CUSTOMER
ZhuYu 22.11.15	ShiCong 22.11.15	WangXueWen 22.11.15	

Universal (Changzhou) Electronics Co., Ltd.

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1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage (Square Wave)	Vp-p	12
1-2	Operating Voltage	Vp-p	3-20
1-3	* Rated Current (Max)	mA	8
1-4	* Min Sound Output at 4.0kHz/10cm	dB	85
1-5	* Resonant Frequency	Hz	4000
1-6	Capacitance at 120Hz	pF	16000±30%
1-7	Operating Temperature	°C	-40~+85
1-8	Storage Temperature	°C	-40~+85
1-9	Weight	g	0.9
1-10	Housing Material	LCP	
1-11	Tone Nature	Single	
1-12	Connection		SMD
1-13	Lead Pin Material	Brass(DSn)	

* Value Applying at Rated Voltage (resonant frequency, 1/2 duty, square wave)

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2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	Storage in High temp.	Storage in $+85^{\circ}\text{C}\pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-2	Storage in Low temp.	Storage in $-40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-3	Storage in Humidity	Storage in $+40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-4	Thermal cycle test.	Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.
2-5	Vibration test	Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).
2-6	Drop test	Free drop a unit from the height 70cm to the surface of 10mm thick board ,three directions(X,Y,Z).
2-7	Solderability test	Soldering temp.: $260\pm 5^{\circ}\text{C}$ Heat applying time: $3\pm 0.5\text{sec}$.

PASS CRITERION :

After these tests , the change of S.P.L shall be within $\pm 5\text{ dB}$.

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3.MEASURING METHOD(BUZZER MODE)

3-1 .Test Condition

3-1-1.STANDARD

Temperature : 25±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-1-2.JUDGEMENT

Temperature : 15 ~ 35℃

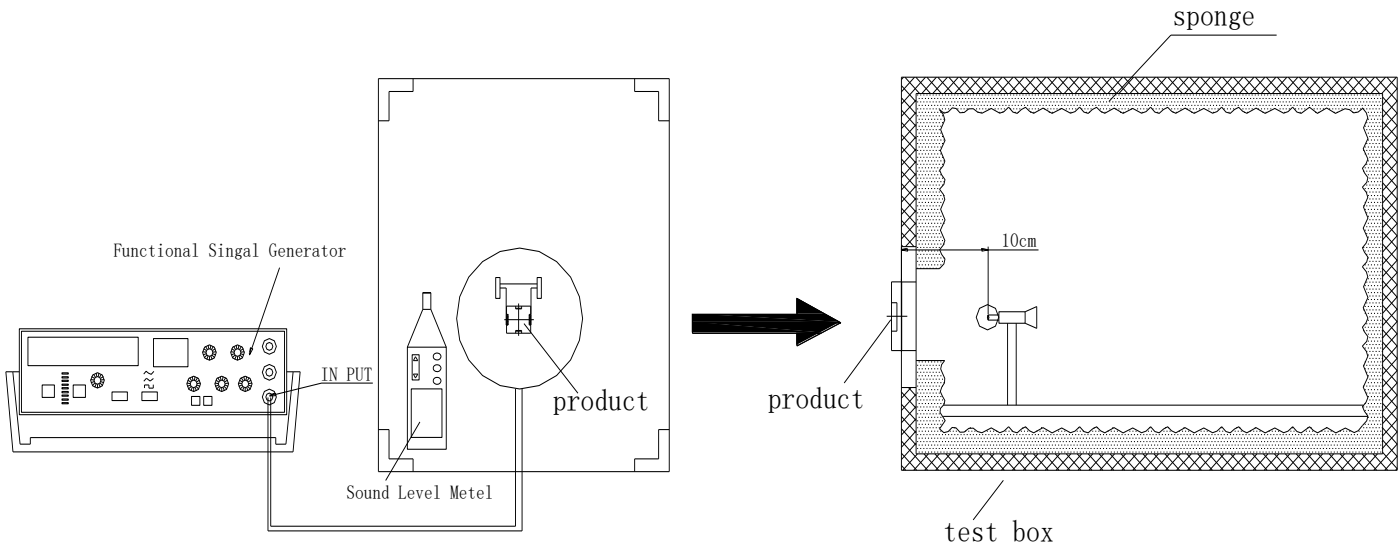
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

3-2 . Standard Test Fixture

3-2-1.rated Voltage(Square wave):12V

3-2-2.Resonant Frequency:4000Hz



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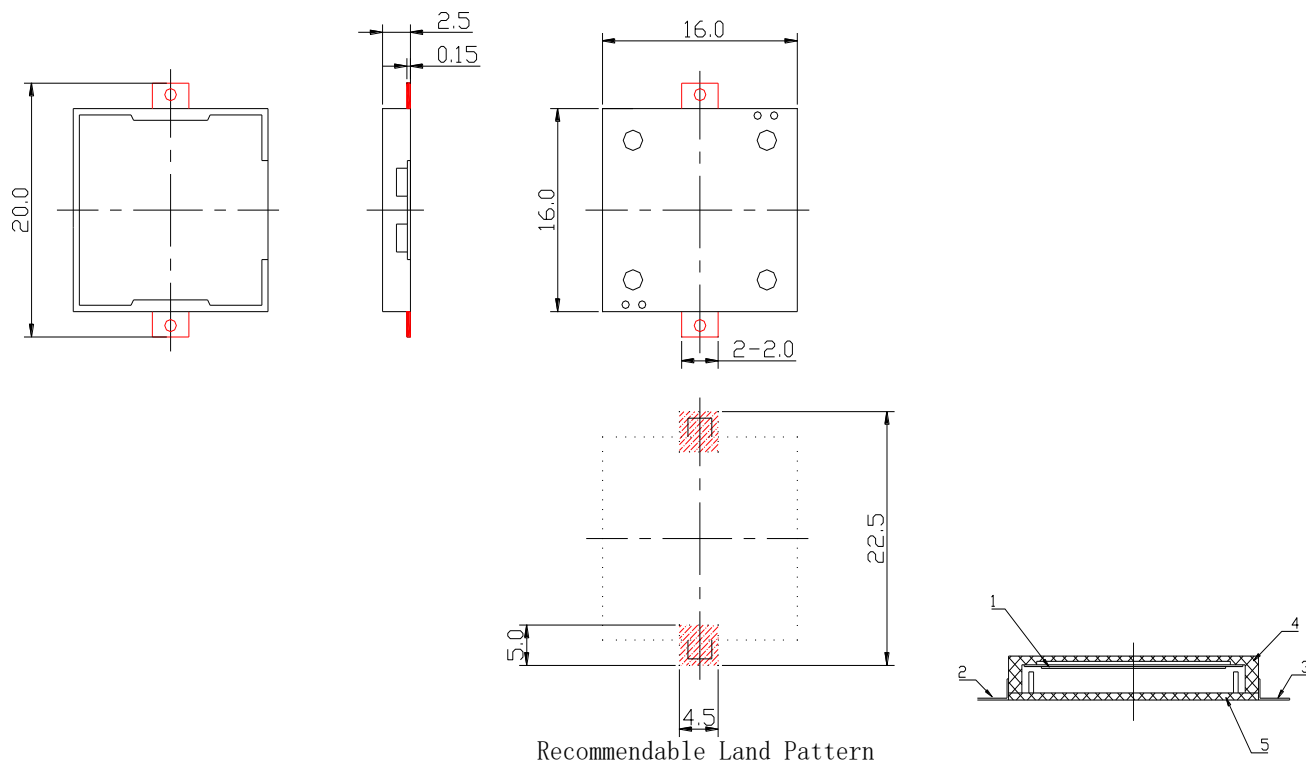
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4.DIMENSIONS

Unless otherwise specified, tolerance: ± 0.5 (unit: mm)



- 1) All parts must be meet to ROHS.
- 2) Reflow soldering allowed and wash not allowed.

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5	Cover	1	LCP	
4	Housing	1	LCP	
3	Pin	1	Brass (DSn)	
2	Pin	1	Brass (DSn)	
1	Piezo element	1	Nickel	
Part No.	Part Name	Q'TY	Material	Remark

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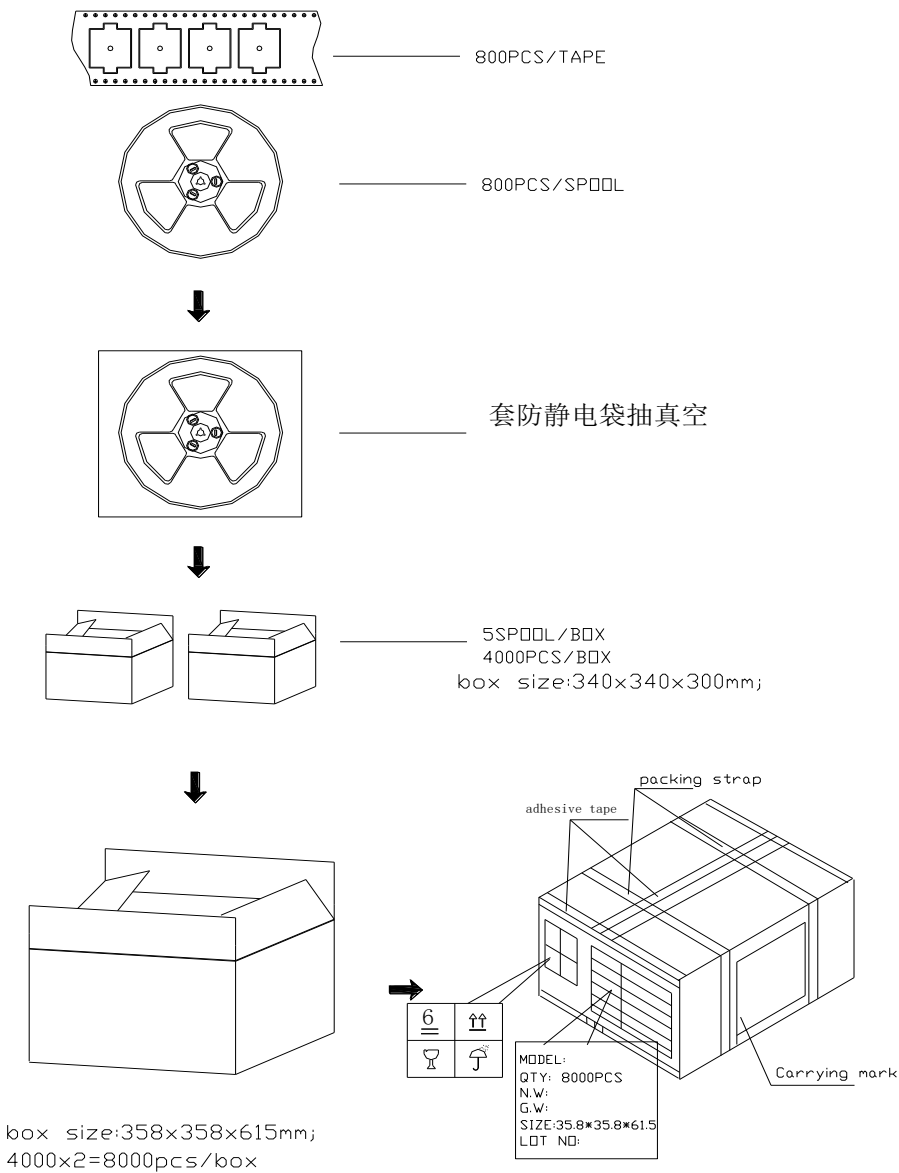
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5.PACKING



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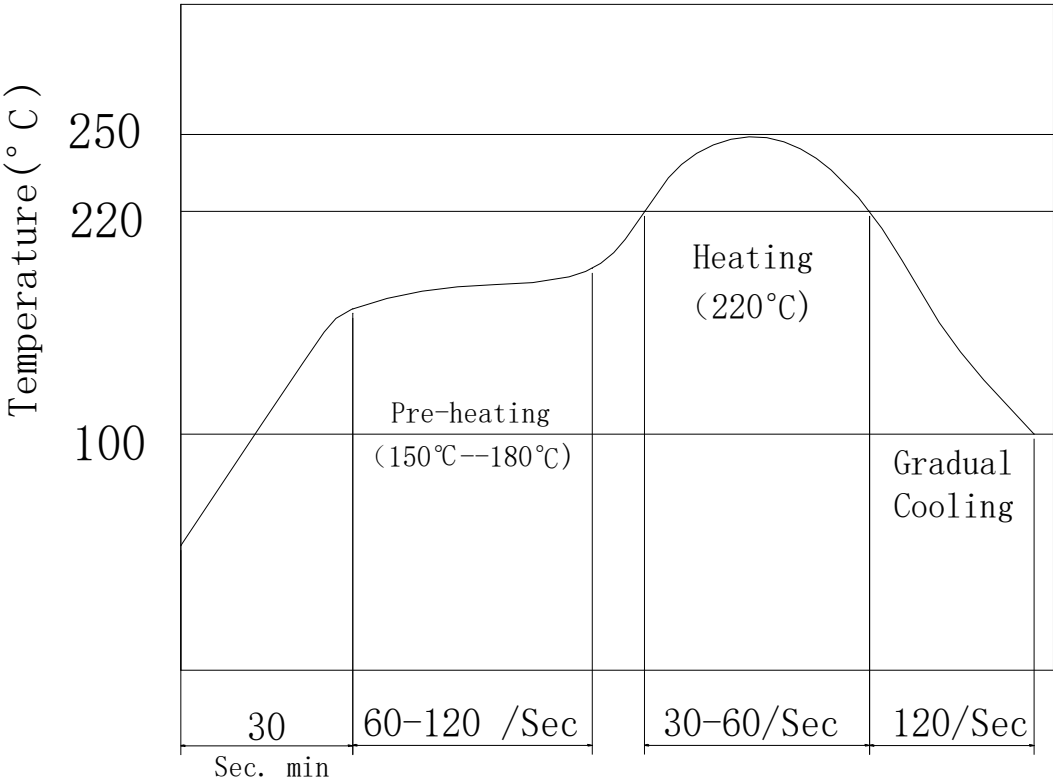
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6.REFLOW SOLDERING CURVE



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