# SPECIFICATION FOR APPROVAL

承 认 书

Description : Piezo Buzzer

Vender's Part No. : **EPI-2616A-12030L100** 

Customer's. Part No. :

Serial No. : SAN-2008

Version No. : 1.1

CUSTOMER'S APPROVED SIGNATURE		

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Approved By	Checked By	Made By
Duan	Litao	Wushao
2014-6-18	2014.06.18	2014.06.18

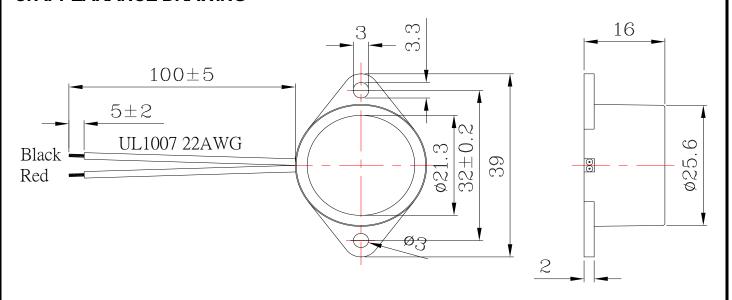
#### A. SCOPE

This specification applies piezo buzzer, EPI-2616A-12030L100

#### **B. SPECIFICATION**

No.	ltem	Unit	Specification	Condition
1	Oscillation Frequency	KHz	3.0±0.5	
2	Operating Voltage	VDC	6 ~ 14	
3	Rated Voltage	VDC	12	
4	Current Consumption	mA	MAX. 35	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 85	at 30cm at Rated Voltage
6	Tone Nature		Constant	
7	Operating Temperature	$^{\circ}\!\mathbb{C}$	-40~ +85	
8	Storage Temperature	$^{\circ}\!\mathbb{C}$	-40 ~ <b>+</b> 85	
9	Dimension	mm	Ф25.6 x H16	See appearance drawing
10	Weight (MAX)	gram	41	
11	Housing Material		ABS( Black )	
12	Leading Pin		Wire type	See appearance drawing
13	Environmental Protection Regulation		RoHS	IP67

# C. APPEARANCE DRAWING



**Tol: ± 0.5 Unit: mm** 

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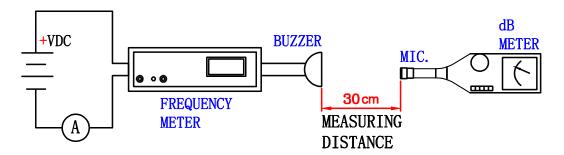
## D.TESTING METHOD

#### **Standard Measurement conditions**

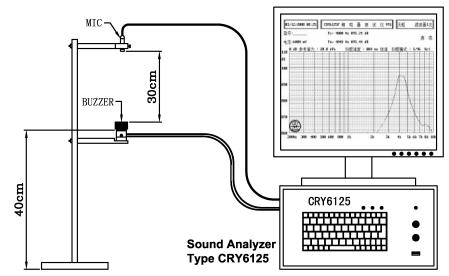
Temperature:25±2°C Humidity:45-65%

#### **Acoustic Characteristics:**

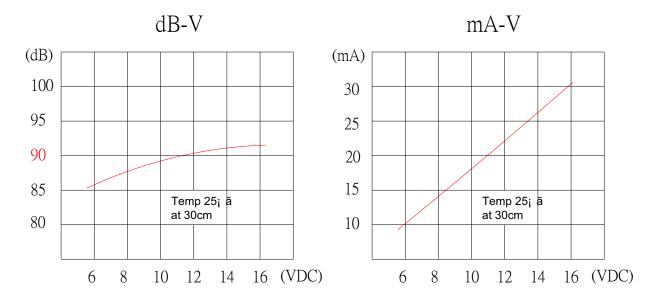
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



## E. VOLTAGE / CURRENT / SOUND PRESSURE CHARACTERISTICS



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#### F. RELIABILITY TEST

NO.	ITEM	TEST CONDITION AND REQUIREMENT		
1	High Temperature Test (Storage)	After being placed in a chamber with 85   2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test:   10dB.		
2	Low Temperature Test (Storage)	After being Placed in a chamber with -40   2°C for 96 hours and then being placed in normal condition for 2 hours.  Allowable variation of SPL after test:   10dB.		
3	Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40   2°C for 96 hours and then being placed in normal condition for 2 hours.  Allowable variation of SPL after test:   10dB.		
4	Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall be consist of:  +85°C  +25°C  +25°C  -40°C  -40°C  0.5 hr  0.5  0.5  0.5  0.5  0.5  0.25  3hours  Allowable variation of SPL after test:   10dB.		
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm.  Allowable variation of SPL after test:   10dB.		
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours .  Allowable variation of SPL after test:   10dB.		
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300   5°C for 3   1 seconds .  90% min. lead terminals shall be wet with solder (Except the edge of terminals).		
8	Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds.  No visible damage and cutting off.		

#### TEST CONDITION.

 Standard Test Condition
 : a) Temperature: +5 ~ +35 ℃
 b) Humidity: 45-85%
 c) Pressure: 860-1060mbar

 一般测试条件
 : a) 温度: +5 ~ +35 ℃
 b) 湿度: 45-85%
 c) 气压: 860-1060mbar

 Judgment Test Condition
 : a) Temperature: +25 ± 2 ℃
 b) Humidity: 60-70%
 c) Pressure: 860-1060mbar

 争议时测试条件
 : a) 温度: +25 ± 2 ℃
 b) 湿度: 60-70%
 c) 气压: 860-1060mbar

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G. PACKING STANDARD  Each minimum package unit of products shall be in a carton box and it shall be clearly marked with Part Number, quantity and outgoing inspection number. There shall be no mechanical damage on products during transportation and/or in storage.
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