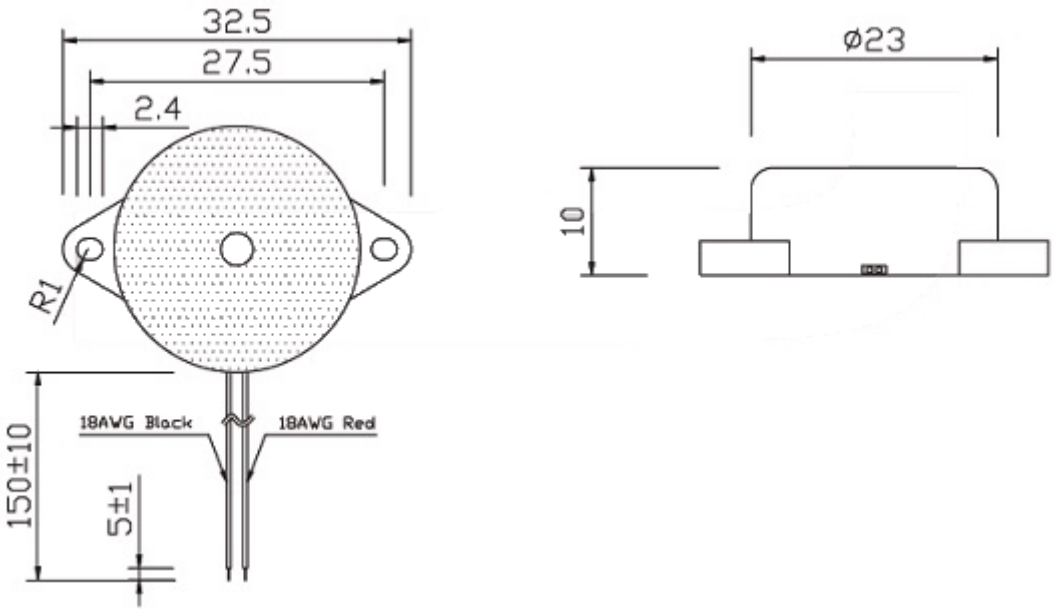
A. SCOPE

This specification applies Internally driven piezo buzzer,with wire. **L-KLS3-LPB-23*10**

B. SPECIFICATION

No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	KHz	3.5±0.5	
2	Operating Voltage	VDC	3 ~ 24	
3	Rated Voltage	VDC	12	
4	Current Consumption	mA	MAX. 10	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 85	at 10cm at Rated Voltage
6	Tone Nature		Constant	
7	Operating Temperature	℃	-40~ +85	
8	Storage Temperature	℃	-40 ~ +105	
9	Dimension	mm	Φ24.0 x H10	See appearance drawing
10	Weight (MAX)	gram	3.5	
11	Housing Material		ABS(Black)	
12	Leading Pin		Wire Type	See appearance drawing
13	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING



Tol : ± 0.5 **Unit: mm**

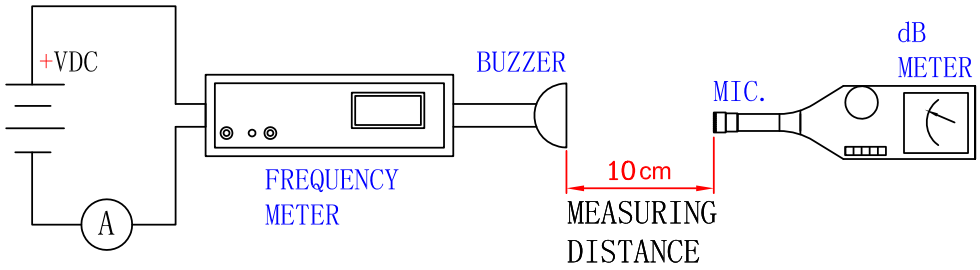
D.TESTING METHOD

Standard Measurement conditions

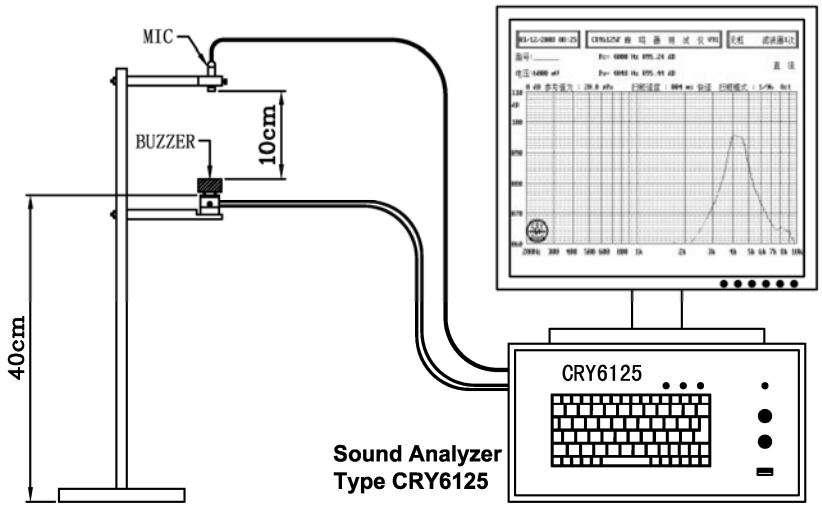
Temperature:25±2℃ Humidity:45-65%

Acoustic Characteristics:

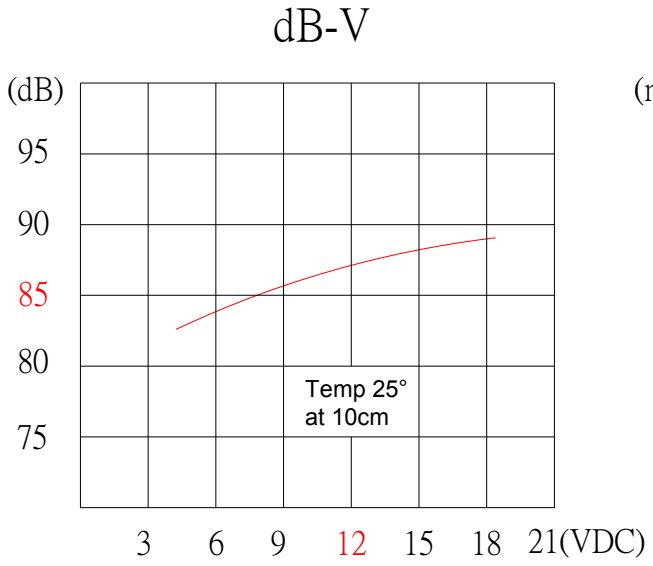
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

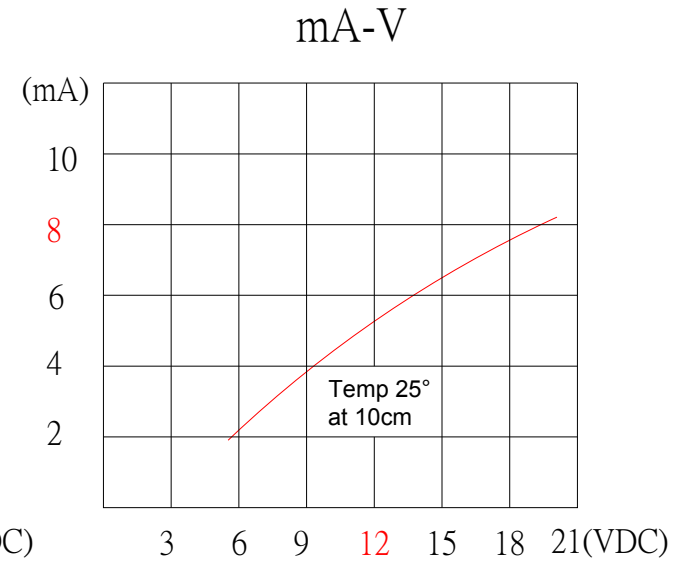


In the measuring test, buzzer is placed as follows:

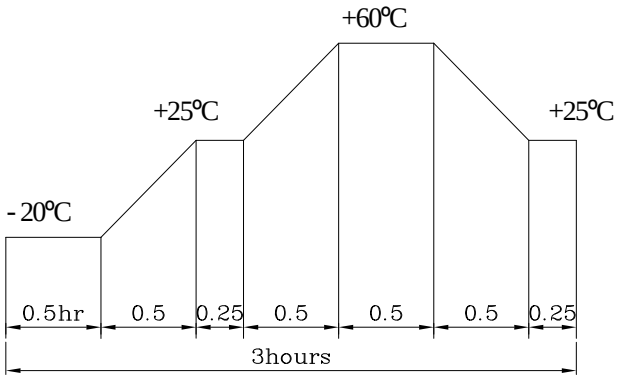


E. VOLTAGE / CURRENT / SOUND PRESSURE CHARACTERISTICS





F. RELIABILITY TEST

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with 70±2ºC 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 -30±2ºC 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±2ºC 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：  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±5ºC 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

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.