A. SCOPE

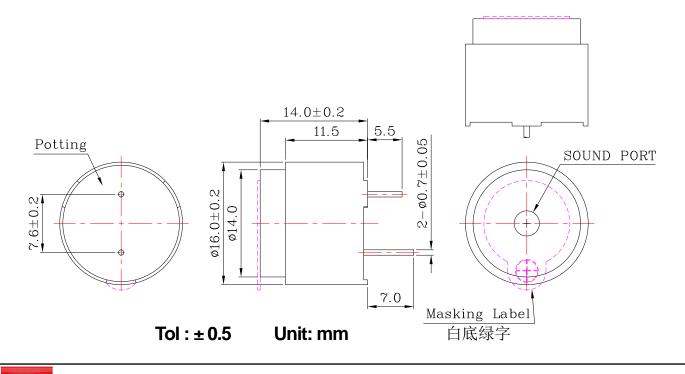
This specification applies Internally driven magnetic buzzers, L-KLS3-MWC-16*14

B. SPECIFICATION

No.	ltem	Unit	Specification	Condition
1	Oscillation Frequency	KHz	2.2 ± 0.3	
2	Operating Voltage	VDC	3~9	
3	Rated Voltage	VDC	3 (3VDC~12VDC Customizable)	
4	Current Consumption	mA	MAX. 30	at Rated Voltage
5	Sound Pressure Level	dB	MIN. <mark>85</mark>	at 10cm at Rated Voltage
6	Tone/Pulse Rate		Constant	
7	Operating Temperature	°C	-40 ~ +85	
8	Storage Temperature	°C	-40 ~ +105	
9	Dimension	mm	16 x H14	See appearance drawing
10	Weight (MAX)	gram	7	
11	Housing Material		PBT(Black)	
12	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING

KLS



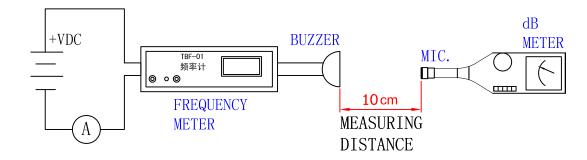
NingBo KLS ELECTRONIC CO.,LTD.

D.TESTING METHOD Standard Measurement conditions

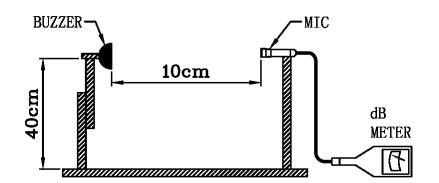
Temperature:25±2°C Humidity:45-65%

Acoustic Characteristics:

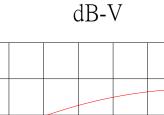
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



E. VOLTAGE / CURRENT / SOUND PRESSURE CHARACTERISTICS



Temp 25°

at 10cm

6

7

8

5

3

4

(dB)

95

90

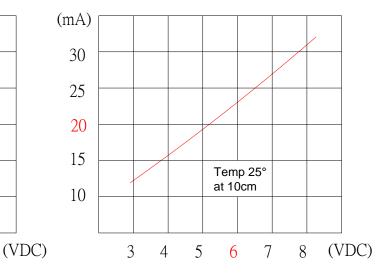
85

80

75

KLS

mA-V



NingBo KLS ELECTRONIC CO.,LTD.

F. RELIABILITY TEST

NO.	ITEM	TEST CONDITION AND REQUIREMENT		
	High Temperature	After being placed in a chamber with 85±2°C for 96 hours and then		
1		being placed in normal condition for 2 hours.		
	Test (Storage)	Allowable variation of SPL after test: ±10dB.		
	Low Townsontow	After being Placed in a chamber with -40±2°C for 96 hours and then		
2	Low Temperature	being placed in normal condition for 2 hours.		
	Test (Storage)	Allowable variation of SPL after test: ±10dB.		
	Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96		
3		hours and then being placed in normal condition for 2 hours.		
		Allowable variation of SPL after test: ±10dB.		
		The part shall be subjected to 5 cycles. One cycle shall be consist of :		
		1 5 5 5		
	Temperature Cycle Test	+75°C		
		+25°C +25°C		
4				
		- 30°C		
		0.5hr 0.5 0.25 0.5 0.5 0.5 0.25		
		3hours		
		Allowable variation of SPL after test: ±10dB.		
	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times,		
5		at the height of 75cm.		
-		Allowable variation of SPL after test: ±10dB.		
	5.71	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		
6	Vibration Test	2 hours.		
		Allowable variation of SPL after test: ±10dB.		
		Lead terminals are immersed in rosin for 5 seconds and then		
_	Solderability Test	immersed in solder bath of $+300\pm5^{\circ}$ C for 3 ± 1 seconds.		
7		90% min. lead terminals shall be wet with solder		
		(Except the edge of terminals).		
		The force of 9.8N(1.0kg) is applied to each terminal in axial direction for		
8	Terminal Strength	10 seconds.		
0	Pulling Test	No visible damage and cutting off.		
TEOTO				
	ONDITION.			
	Teat Oan differen			
Standard	Test Condition :	a) Temperature : +5 ~ +35 °C b) Humidity : 45-85% c) Pressure : 860-1060mbar		
Standard	Test Condition : 一般测试条件 : nt Test Condition :	a) Iemperature : +5 ~ +35℃ b) Humidity : 45-85% c) Pressure : 860-1060mbar a) 温度 : +5 ~ +35℃ b) 湿度 : 45-85% c) 气压 : 860-1060mbar a) Temperature : +25 ± 2℃ b) Humidity : 60-70% c) Pressure : 860-1060mbar		

KUS

NingBo KLS ELECTRONIC CO.,LTD.

