

PRODUCT: Electromagnetic Buzzer

EDITION: A/2017

Soberton Inc.

THIS SPECIFICATION APPLIES TO THE ELECTROMAGNETIC BUZZER

SPECIFICATION

TEST CONDITION: TEMP= +25 ±2°C RELATED HUMIDITY= 65 ±5% AIR PRESSURE: 860 ~ 1060MBAR

item	unit	specification	condition
rated voltage	Vo-p	3.6	Vo-p 🚹
operating volt	Vo-p	2.5 ~ 4.5	
mean current	mA	Max.100	At rated voltage 2500Hz, square wave, 1/2 duty
coil resistance	Ω	16 ±3	
sound output	dBA	80	At 10cm (A-weight free air), at rated voltage
			2500Hz, square wave, 1/2duty
rated frequency	Hz	2500	
operating temp	°C	-30 ~ +85	
storage temp	°C	-40 ~ +85	
dimension	mm	7.5×7.5×H2.5	See attached drawing
weight	gram	0.8	
material		LCP(Black)	
terminal		SMD Type (Plating Sn)	See attached drawing
environmental		RoHS	
protection regulation			

ENVIRONMENT TEST

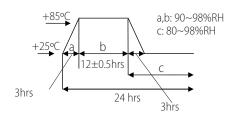
item	test condition	e
high temp. test	After being placed in a chamber at +85°C for 96	A
	hours.	W
low temp. test	After being placed in a chamber at -30°C for 96	fc
	hours.	TI
thermal shock	The part will be subjected to 10 cycles.	0
	One cycle shall consist of:	
	+85℃	
	-30°C 30 min 30 min 60 min	_
. // * 15.	TI	

evaluation standard

After the test the part will meet specifications without any degradation in appearance and performance except SPL. After 4 hours at ± 25 °C. The SPL will be in ± 10 dBA compared with initial one.

temp./humidity cycle

The part will be subjected to 10 cycles. One cycle shall be 24 hours and consist of:





PRODUCT: Electromagnetic Buzzer

EDITION: A/2017



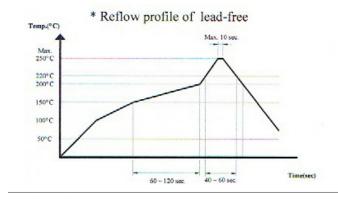
RELIABILITY TEST

item	test conditions	evaluation standard
operating life test	ORDINARY TEMPERATURE	After the test the part will meet specifications
	The part will be subjected to 96 hours of	without any degradation in appearance and
	continuous operation at $+25 \pm 10$ °C.	performance except SPL, after 4 hours at +25°C.
	HIGH TEMPERATURE	Allowable variation of SPL after test: ±10dB
	The part will be subjected to 72 hours of	
	continuous operation at +85°C with 3.6V,	
	2500Hz applied.	
	LOW TEMPERATURE	_
	The part will be subjected to 72 hours of	
	continuous operation at -30°C with 3.6V, 2500Hz	
	applied.	
TEST CONDITION		
Standard Test Condition:	a) Temperature : +5 ~ +35°C b) Humidity : 45 ~ 85%	c) Pressure : 860 ~ 1060mbar

MECHANICAL CHARACTERISTICS

item	test conditions	evaluation standard
solderability	Lead terminal are immersed in rosin for 5 seconds and then immersed in solder bath of +260 ±5°C for 3 ±0.5 seconds	90% min. lead terminals will be wet with solder
soldering heat resistance	The product followed the reflow temperature curve to test its reflow thermostability.	No interference in operation.
terminal mechanical strength	Lead pads will be soldered on the pc board, and the force 9.8N(1.0Kg) will be applied behind the part for 10 seconds.	No damage and cutting off.
vibration	The part will be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude will be 1.52mm(9.3G). The vibration test will consist of 2 hours per axis in each three axes(X,Y,Z). Total 6 hours.	After the test the part will meet specifications without any damage in appearance and performance except SPL. The SPL would be ± 10 dBA compared with the initital one.
drop test	The part only will be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes(X,Y,Z). A total of 9 times.	-

RECOMMENDED WAVE SOLDERING TEMPERATURE CURVE



Recommendable reflow soldering condition as follows:

Note 1: It is requested that reflow soldering should be executed after heat of product goes down to notrmal tempertaure.

Note 2: Peak reflow temperature of 250°C Max 10 sec. with a maximum

duration of 40-60 sec. between 220°C and 250°C

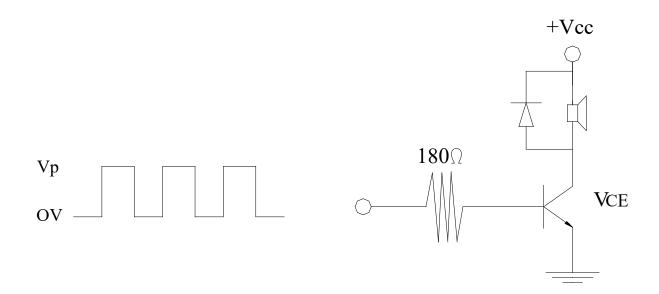


PRODUCT: Electromagnetic Buzzer

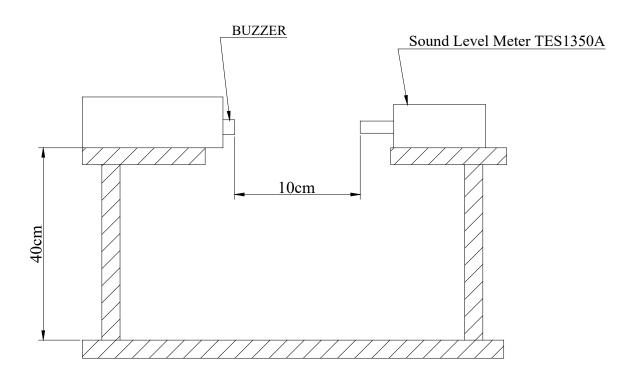
EDITION: A/2017

Soberton Inc.

MEASUREMENT TEST CIRCUIT



INSPECTION FIXTURE





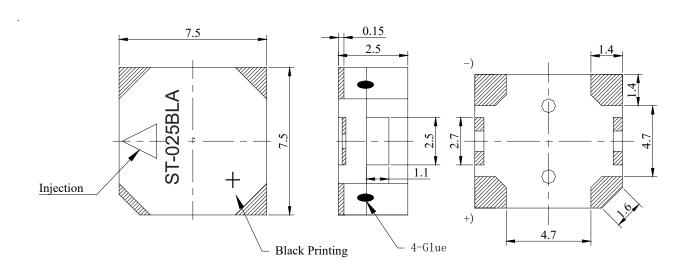
PRODUCT: Electromagnetic Buzzer

EDITION: A/2017

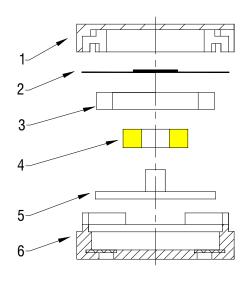
Soberton Inc.

DIMENSIONS

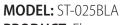
Tolerance:±0.3 (unit: mm)



Tolerance: ± 0.5 Unit:mm



no	components	material	quantity
1	Case	LCP	1
2	Diaphragm	Ferrum	1
3	Magnet ring	NdFeB	1
4	Coil	Copper	1
5	Core	Ferrum	1
6	Case	LCP	1





PRODUCT: Electromagnetic Buzzer

EDITION: A/2017

Soberton Inc.

PACKING

