Buzzer, Piezo

SB090PP-13768-T85

Description

A piezo buzzer generates sound using a piezoelectric material that vibrates when an electrical voltage is applied. The oscillating vibrations produce audible tones. Compact and energy-efficient, it converts electrical signals into acoustic signals, making it ideal for alarms, notifications, and user interface feedback in various electronic devices.

Typical applications

- Electronic devices
- Industrial and commercial equipment
- Home appliances
- Toys and games
- Sound effects
- Audio Alerts
- Warning Signals
- Audio Feedback
- Electronic devices
- Industrial and commercial equipment
- Home appliances
- Toys and games
- Sound effects
- Audio Alerts
- Warning Signals
- Audio Feedback

Active / Passive

Features

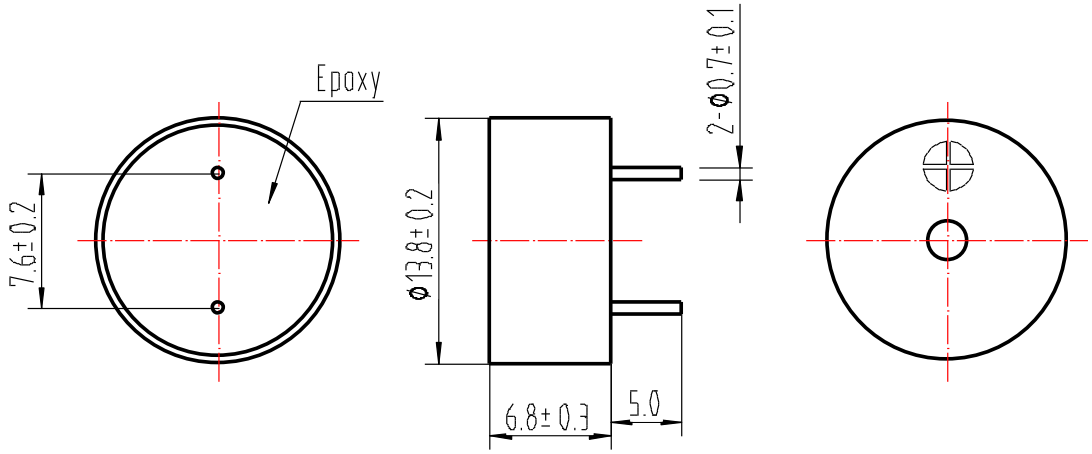
Item	Specification	Unit	Condition
Oscillation Frequency	4000	Hz	square wave
Operating Voltage	1 ~30	Vp-p	
Rated Voltage	9	Vp-p	
Current Consumption	MAX. 3	mA	at Rated Voltage

Buzzer, Piezo

SB090PP-13768-T85

Sound Pressure Level	MIN. 85	dB	at 10cm at Rated Voltage
Electrostatic Capacity	12000±30%	pF	at 120Hz 1V
Operating Temperature	-20~ +70	℃	
Storage Temperature	-30 ~ +80	℃	
Dimension	Φ13.8 x H6.8	mm	See appearance drawing
Weight (MAX)		gram	
Housing Material	PPO (Black)		
Leading Pin			
Certifications	RoHS		

Appearance drawing



Tol : ± 0.5 Unit: mm

Buzzer, Piezo

SB090PP-13768-T85

Testing method

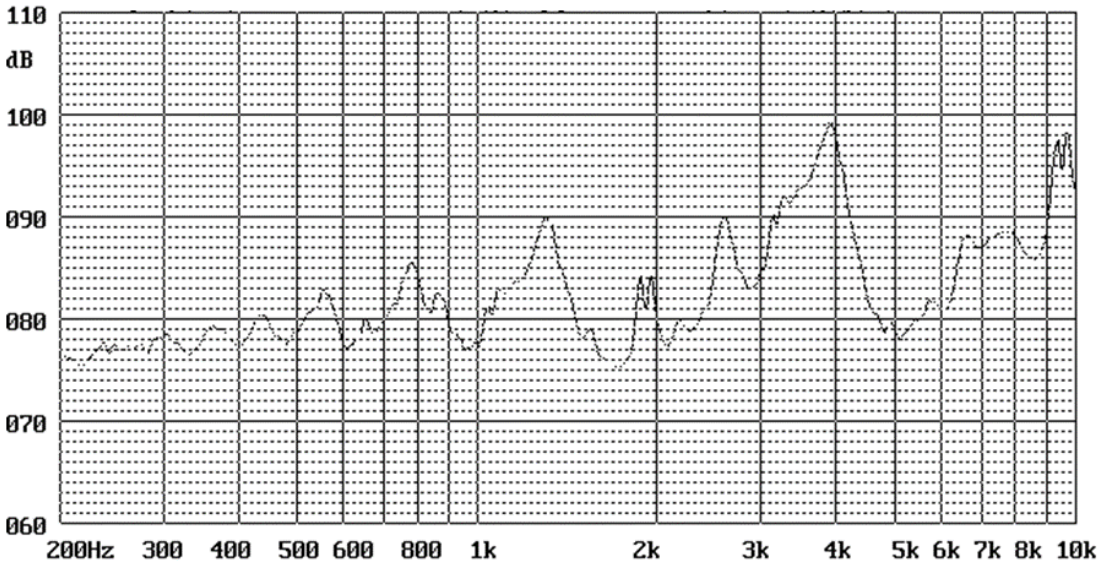
Standard Measurement conditions

Temperature:	25 ± 2℃
Humidity:	45 - 65%

Acoustic Characteristics

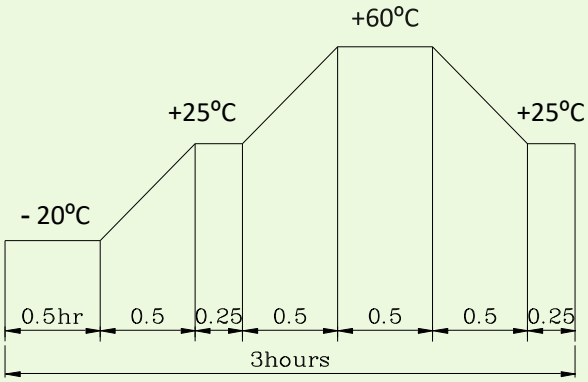
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments at 10 cm.

Typical Frequency Response Curve



RELIABILITY TEST

Item	Test condition and requirement

High Temperature Test (Storage)	After being placed in a chamber with 80□2ºC for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: □10dB.
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.
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.
Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall consist of ：  Allowable variation of SPL after test: □10dB.
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.
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.
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).
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

Temperature:	+5 ~ +35℃
Humidity:	45 - 85%
Pressure:	860 - 1060mbar

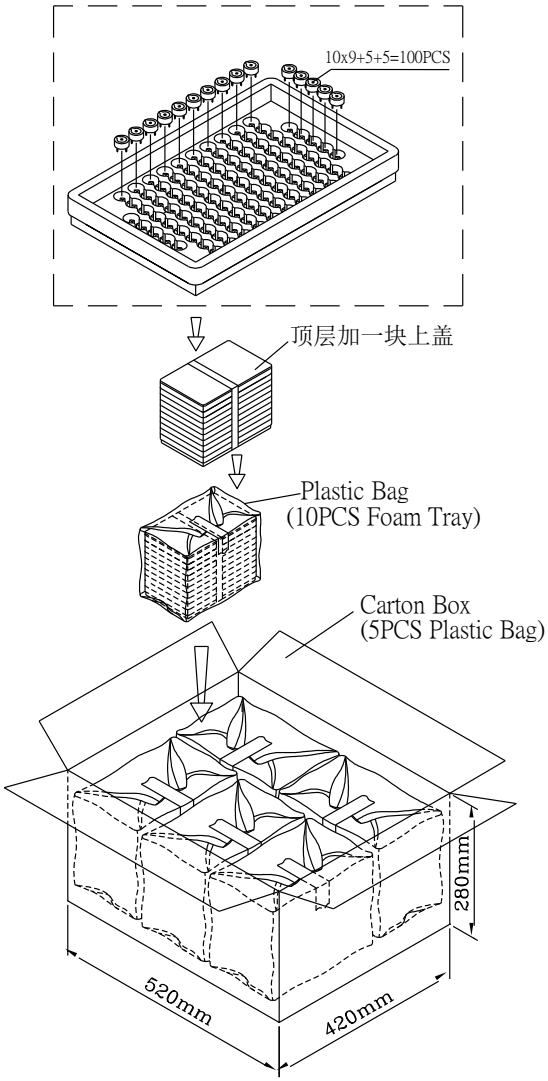
Judgment Test Condition

Temperature:	+25 ± 2℃
Humidity:	60 - 70%
Pressure:	860 - 1060mbar

Buzzer, Piezo

SB090PP-13768-T85

Packing standard



Foam Tray	240mmx160mmx30mm	1x100PCS=100PCS
Plastic Bag		10x100PCS=1000PCS
Carton Box	520mmx420mmx280mm	5x1000PCS=5,000PCS

Buzzer, Piezo

SB090PP-13768-T85

Part number

SBXXXXX-XXX-XX

SB	Buzzer
XXX	Rated power
X	Passive / Active
X	Piezo / Magnetic
XXXXX	Size
X	THT / SMD
XX	dB @ rated power

Ordering information

Ordering can be done via www.summit-electronics.com or via info@summit-electronics.com. Please contact us for more information. Customisation of the product is available on request.

Technical support

For all product questions please contact us via info@summit-electronics.com

Document revision

Rev	Date	changes
V01.00	06-04-2023	First issue of document