Buzzer, Piezo

SB030PP-12030-S80

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.



Applications

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

Features

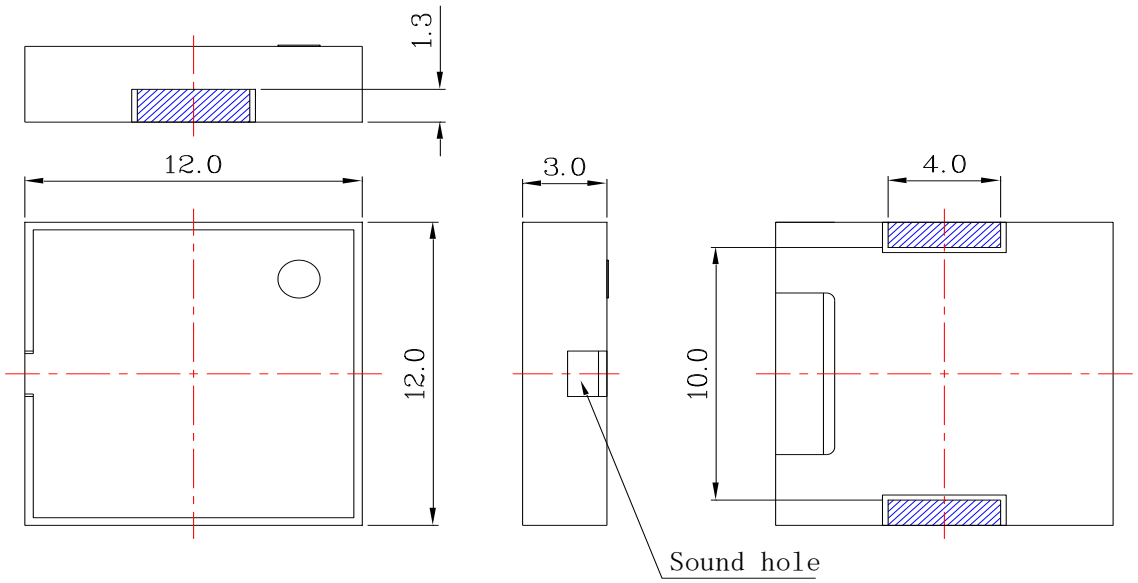
Item	Specification	Unit	Condition
Oscillation frequency	4000	Hz	Square Wave
Operating voltage	1~25	Vp-p	
Rated voltage	3	Vp-p	
Current consumption	MAX.5	mA	at Rated Voltage
Sound pressure level	MIN.80	dB	at 10cm at Rated Voltage
Electrostatic Capacity	16.000±30%	pF	At 100Hz 1V
Operating temperature	-40~ +85	℃	
Storage temperature	-40 ~ +85	℃	
Weight	0.4	gram	
Dimension	12 x 12 x H3	mm	See appearance drawing
Housing material	LCP (Black)		
Leading pin	In Plated Brass (Sn)		See appearance drawing
Environmental	RoHS		

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Protection Regulation

Appearance drawing



Tol : ± 0.5 Unit: mm

Testing method

Standard Measurement conditions

Temperature:	25±2℃
Humidity:	45-65%

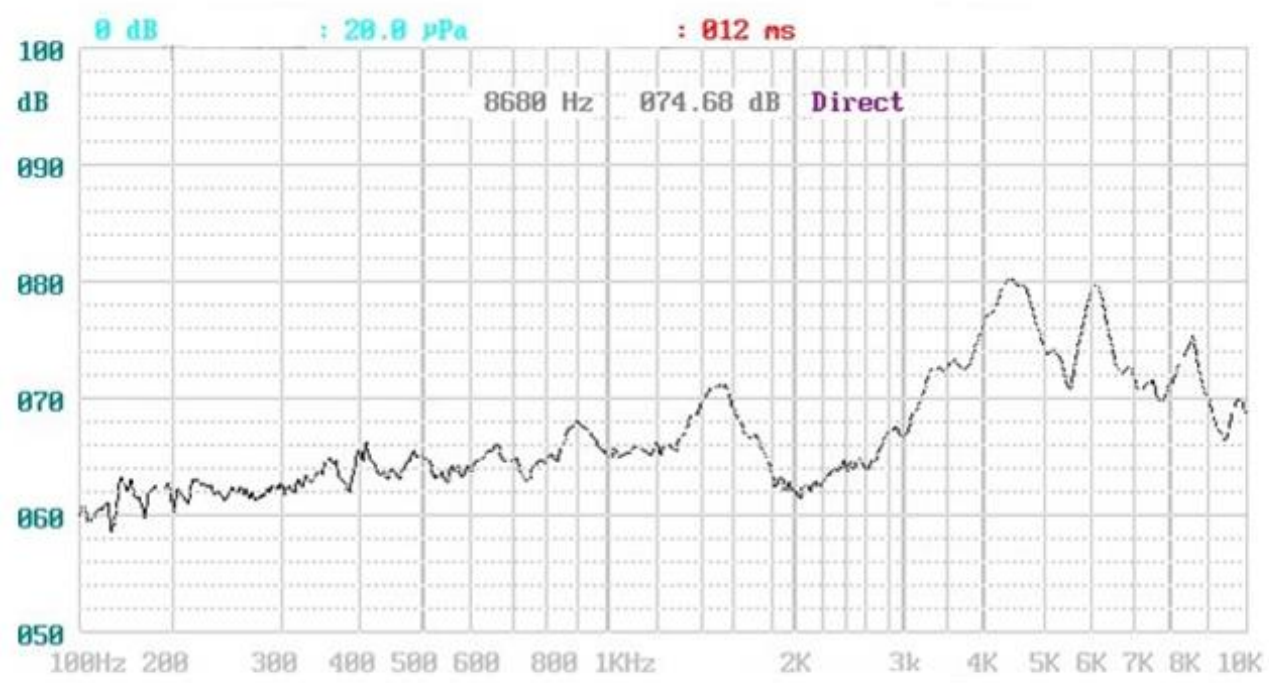
Acoustic Characteristics

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

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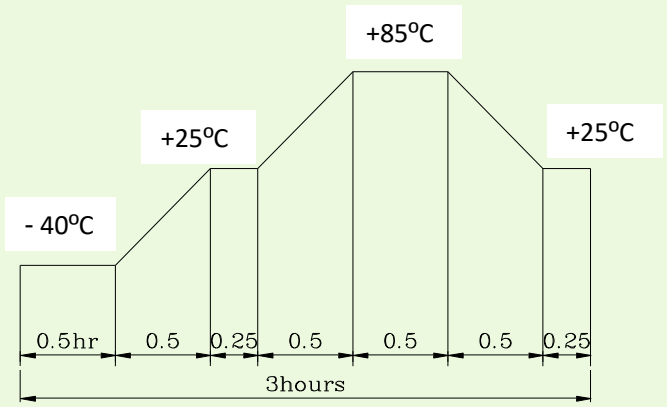
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Typical Frequency Response Curve



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 20 cycles. One cycle shall be 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 for10 seconds. No visible damage and cutting off.

Test condition

Standard Test Condition

Temperature:	+5 ~ +35°C
Humidity:	45 - 85%
Pressure:	860 – 1060 mbar

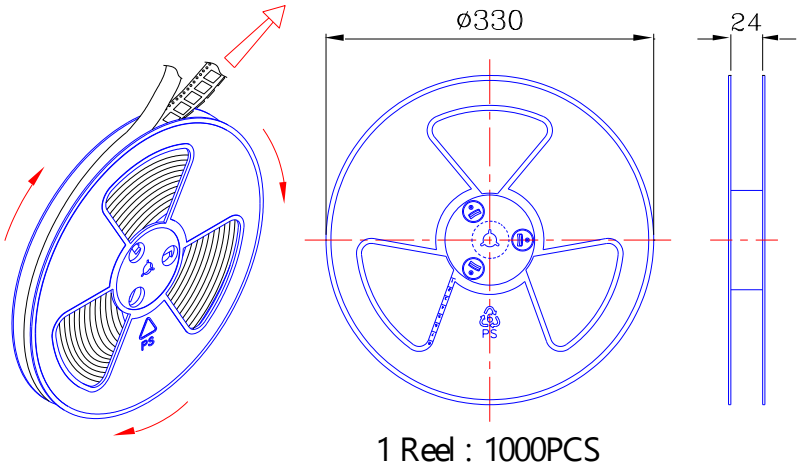
Judgment Test Condition

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

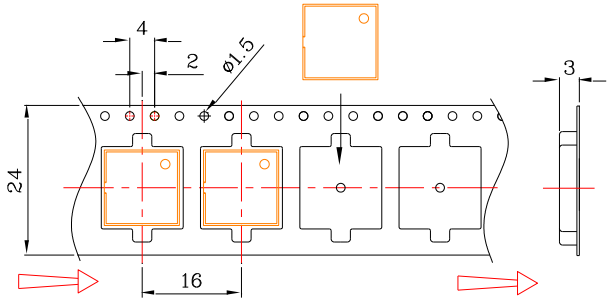
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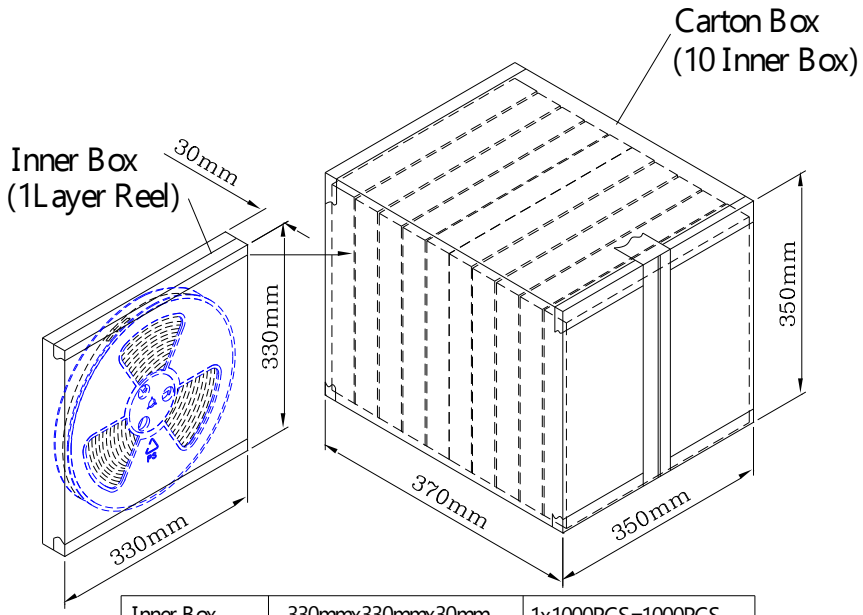
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Package



1 Reel : 1000PCS





Inner Box	330mmx330mmx30mm	1x1000PCS=1000PCS
Carton Box	350mmx350mmx370mm	10x1000PCS=10,000PCS

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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	19-08-2024	First issue of document