

### General Description

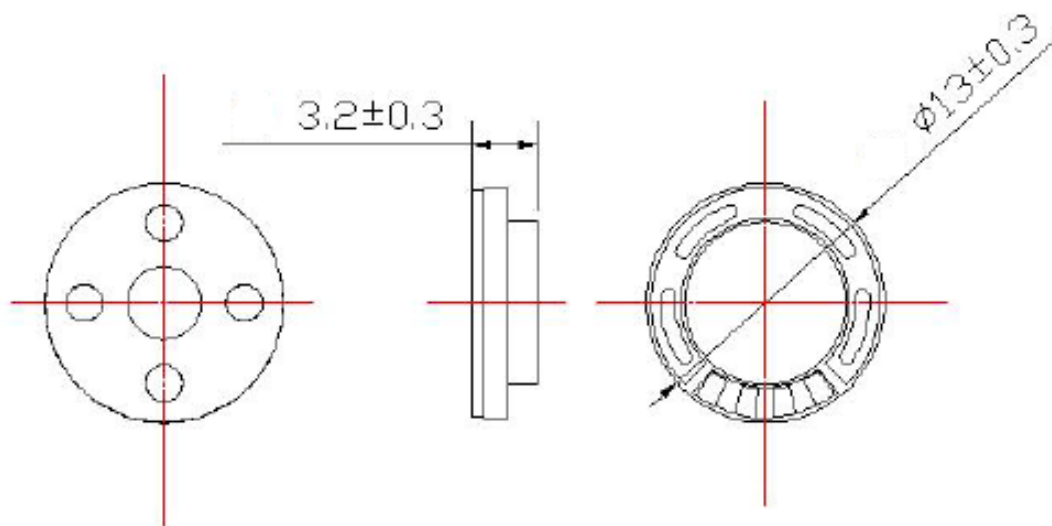
Φ13 x 3.2mm Speaker



### ELECTRICAL SPECIFICATIONS

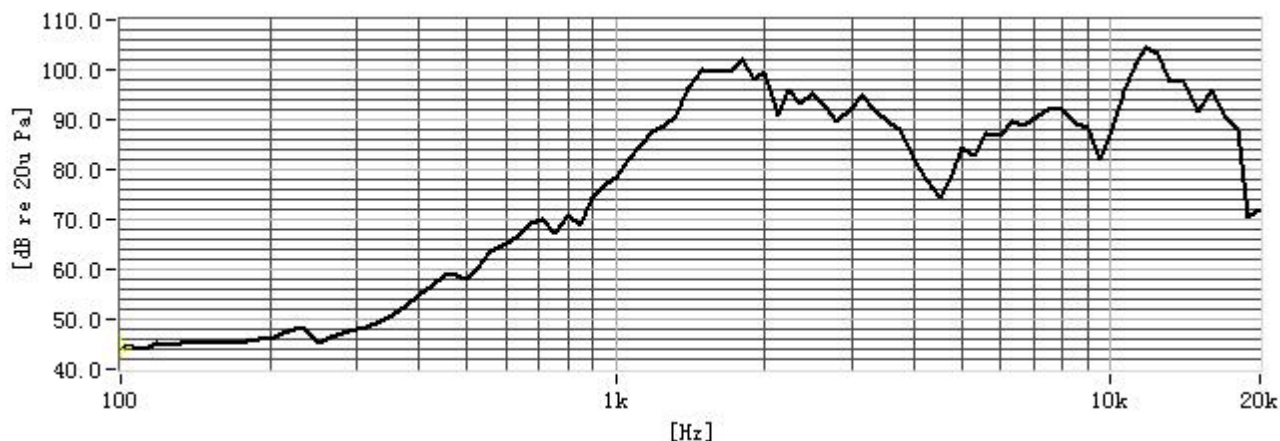
Parameters		Value	Unit
Lowest Resonance Frequency		1600 ±20%	Hz
Impedance	@ 1.0kHz	8±20%	Ω
Rated Input Power		0.5	W
Input Power, max		1	W
Dimension		Φ13	mm
Height		3.2	mm
Sound Pressure Level	@ SPL(0.1m,0.5W) @ 1.0,1.2,1.5, 2.0kHz (0dB SPL=20μPa)	91±3	dB
Distortion, max	@ 2.0kHz	10	%
Operating Temperature Range		-20 ~ +50	°C
Storage Temperature Range		-30 ~ +60	°C
Audible Noise	The input power shall be set at rated noise power(0.5W). Using an audio oscillator sweep from F0 to 10kHz in free air. There shall be no buzzes, rattles, nor spurious noises.		

### DIMENSIONS

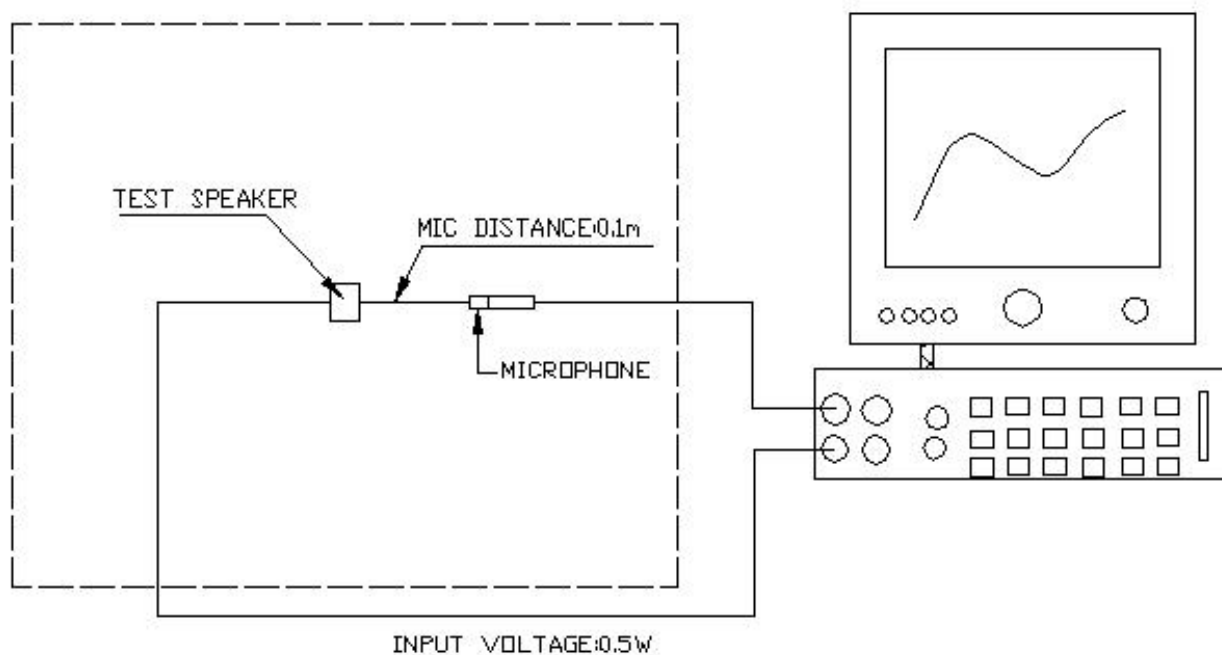


Unit: mm; Tolerance: ±0.3mm Except Specified

### FREQUENCY CHARACTERISTICS



### ELECTRICAL AND ACOUSTICAL MEASURING CONDITION



## RELIABILITY TEST

### Reliability Test Performance

#### High Temperature Test

96hours at +60°C±5°C

#### Low Temperature Test

96 hours at -30°C±5°C

#### Humidity Test

96hours at +40°C±5°C, 90-95% RH

#### Vibration Test

Vibration: 10Hz ~ 55Hz

Amplitude: 1.5mm or acceleration : 50m/s<sup>2</sup>

Duration : 2h per axis=10cycles ; 3 axis

#### Temperature Cycle Test

Temperature: -30°C ↔ +60°C

Duration : 2 hours 2hours

Cycle: 5 Cycle

#### Drop Test Drop

Height: 1.0m ( 75° )

Cycle: 6 Cycles

#### Load Test

Noise: White noise

Power: 0.5W

Duration: 96 hours and satisfy

#### Waterproof Grade

IP67

## APPROVAL

DRAWN BY	AR, April 23, 2025
APPROVED BY	CP, April 23, 2025
REVISION	A, Initial Release



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