



soberton inc.

PIEZOELECTRIC
CERAMIC
ELEMENT

Acoustic Product Specification

Product Number: PT-1205TF



Release | Revision: A/2026

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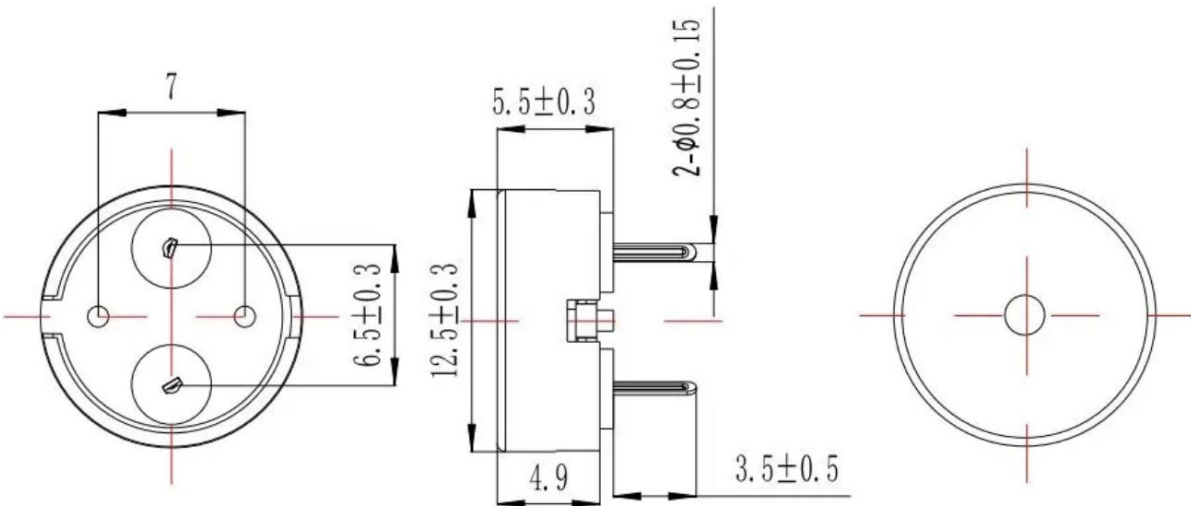
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Specifications

Item	Unit	Specification
Resonant Frequency	Hz	4000±500
Operating Voltage	Vp-p	1 ~ 20
Rated Voltage	Vp-p	5
Rated Current	mA	Max. 5 at 4.0KHz 50%, duty cycle, square wave, 5Vp-p
Sound Output	dB	Min. 80 at 4.0KHz 50%, duty cycle, square wave, 5Vp-p
Capacitance	pF	12000±30% at 120Hz
Operating Temperature	°C	-20 ~ +70
Storage Temperature	°C	-30 ~ +85
Terminal	Pin Type (Flat Pins)	
Pin Length	mm	L1=3.5±0.5, ø0.8±0.15
Dimensions	mm	ø12.5x H5.5
Housing Material	Black PBT	
Net Weight	gram	Approx. 0.6
Environmental Protection Regulation	RoHS 2.0	

Dimensions

Unit: mm
Tolerance: ±0.5mm, except where specified



Housing Material: Black PBT



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Reliability Test

After any of following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall meet the specifications and shall not deviate more than -10dB from the initial value.

Standard Temperature Life Test

The part shall be subjected to 96 hours at 25±10°C.

Input rated voltage: 5 Vp-p

Resonant frequency: 4000Hz, 50% duty cycle, square wave

High Temperature Test

The part shall be capable of withstanding a storage temperature of +80°C for 96 hours.

Low Temperature Test

The part shall be capable of withstanding a storage temperature of -30°C for 96 hours.

Humidity Test

Temperature +40°C±3°C

Relative Humidity 90% ~ 95%

Duration 48 hours and exposure to room temperature for 6 hours

Temperature Shock Test

Per cycle

70°C/1 hour → 25°C/3 hours → -20°C/1 hour → 25°C/3 hours

Total cycle 10 cycles

Drop Test

Standard Packaging from 0.75m

Drop on hardwood or board of 4cm thick, three sides, six plain

Vibration Test

Vibration 1000 cycles /minute

Amplitude 1.5mm

Duration 1 hour in each 3 axes

Note

Please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. Contamination may result in a loss of some or all audio output.



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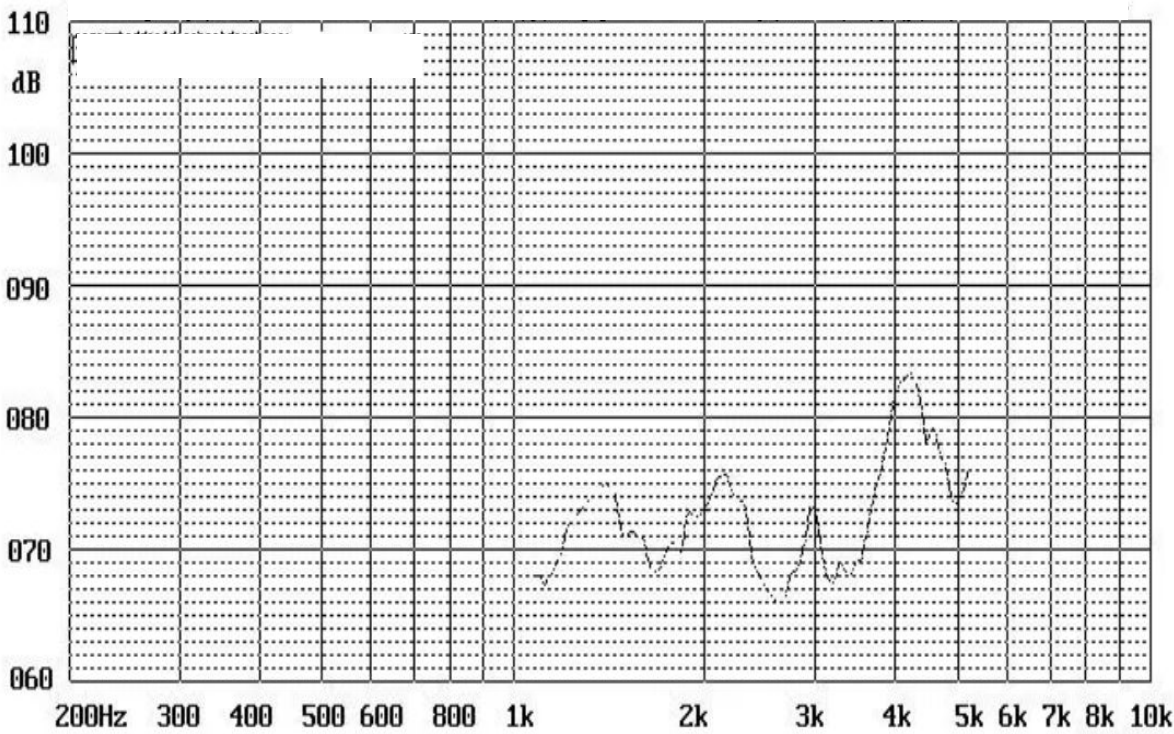
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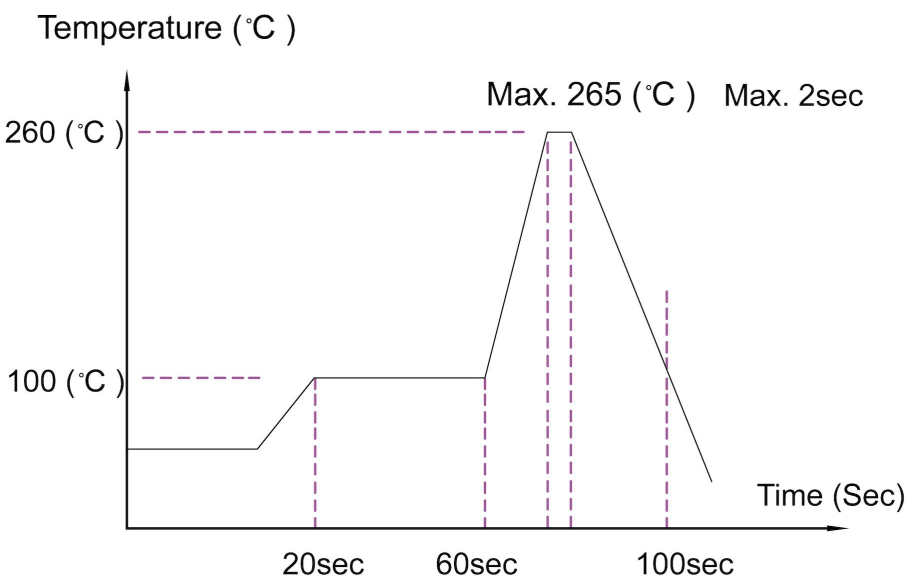
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Frequency Response

5Vp-p, 50% duty cycle, square wave, at 10cm

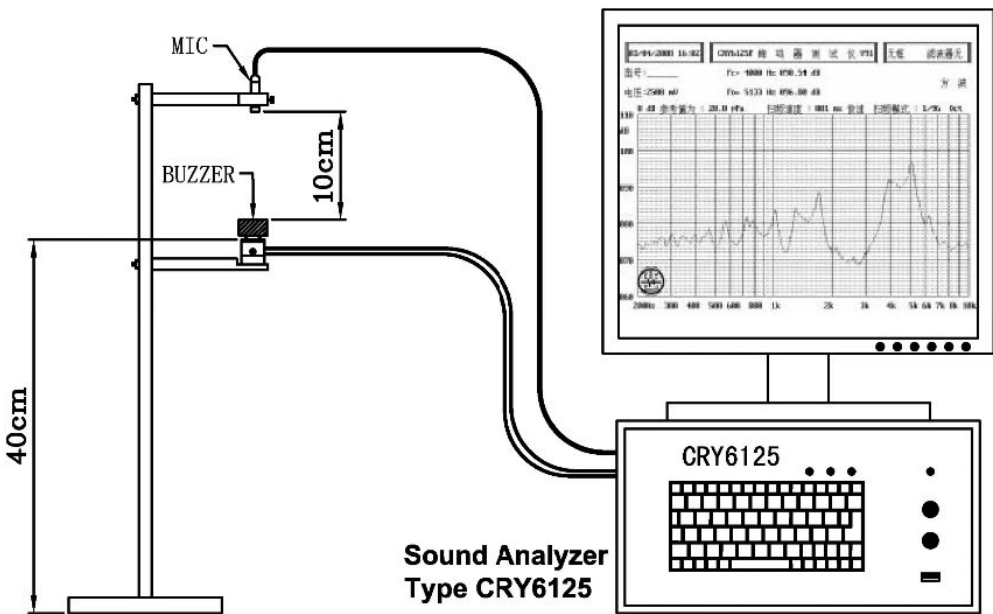


Recommended Wave Soldering Temperature



Electrical And Acoustical Measuring Condition

Recommended Setting





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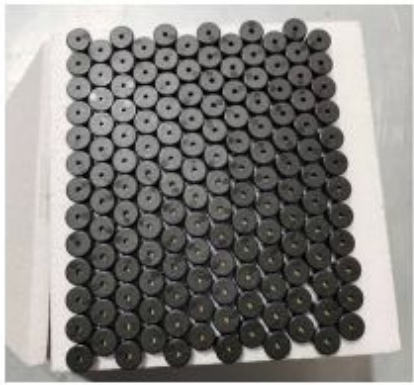
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Packing

Packing



200pcs



200pcsx10=2000pcs



2000pcs



2000pcsx4= 8000pcs

Package Item	Package Qty
Tray	200 pcs
Bundle	2000 pcs
Carton	4 Bundles
Carton	8000 pcs