

## CT14U-150T580-D1X

Rev. 0-2024  
RoHS3 & REACH  
IP68

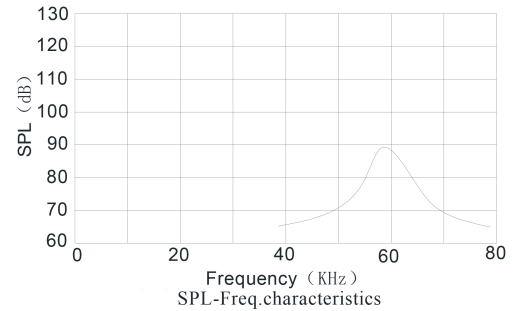
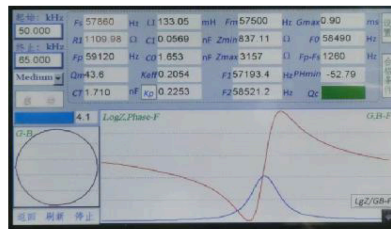
Ultrasonic Sound Transducers



### Operating Characteristics

#### ELECTRICAL

Operating Mode	Transmitter / Receiver
Max Operating Voltage	150 Vp-p
Capacitance	2,000 pF ± 20 % 1,000 Hz
Impedance	≤3,000 Ω 58,000 Hz



#### ACOUSTIC

Min SPL at V Rated	≥85 dB at 30cm, 10Vrms
f <sub>o</sub>	58,000 ± 1,500 Hz
Horizontal Angle	95 ± 15° (-6 dB)
Vertical Angle	50 ± 15° (-6 dB)
Detectable Range	0 to 500 cm
Ring Time	≤1.6ms
Test Conditions	elmos52409
Echo	>90 mV/mV
Test Conditions	Test Plate φ 50× 1,000mm PVC pipe, 1m

Freq-R1.characteristics

### Physical Characteristics

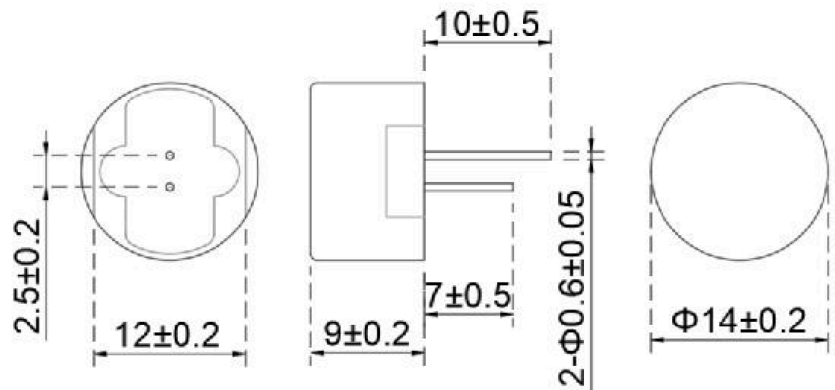
#### MATERIAL

Housing	Aluminum
PC Pin	Tin Plated Copper

#### TEMPERATURE RANGES

Operating	-40 to +80°C
Storage	-40 to +85°C

Weight 14 g



General tolerance = ±0.2 mm and all measurements in mm unless otherwise noted.

Revision	Description	By	Date
0-2024	Original Specification	JL	2024-09-19

Warranty: For a period of one (1) year from date of shipping under normal operations conditions. This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair.

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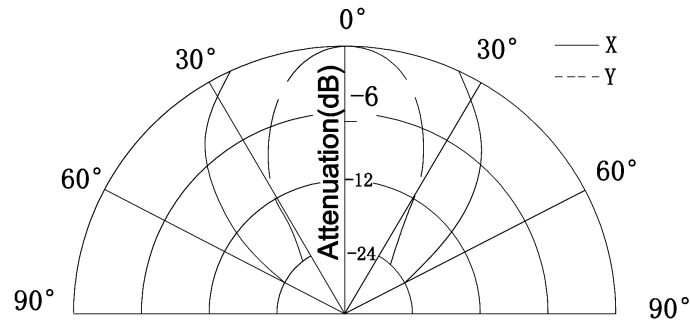
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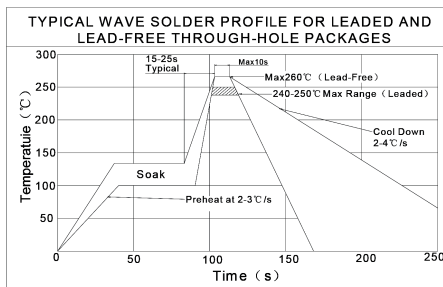
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## Beam Directivity



## Wave Solder Profile

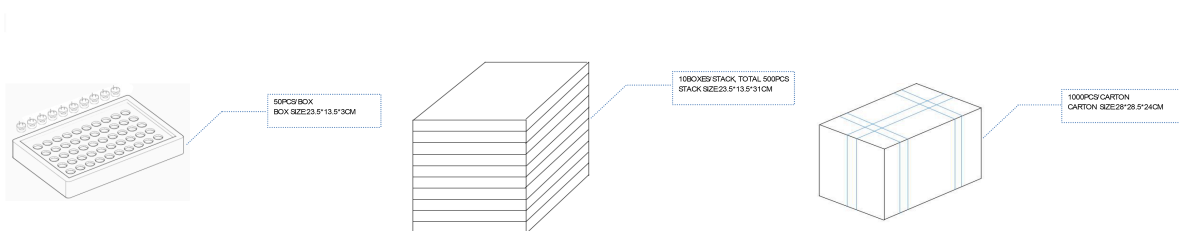


### WAVE SOLDER PROFILE

Profile Feature	SnPb eutectic	Pb-Free
Average ramp-up rate	~200°C/second	~200°C/second
Heating Rate during preheat	Typical 1-2°C/second, max 4°C/second	Typical 1-2°C/second, max 4°C/second
Final preheat temperature, Ts	~130°C	~130°C
Peak temperature, Tp	235°C	260°C
Time within +0°C/-5°C of actual temperature, tp	10seconds	10seconds
Ramp-down rate	5°C/second max.	5°C/second max.

**NOTE:** This document should serve as recommendation only. Other parameters may also affect soldering, this profile does not guarantee absolute success. Soldering profile should be determined by the equipment manufacturer and customers process engineer.

## Packaging



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