PIEZO TRANSDUCER

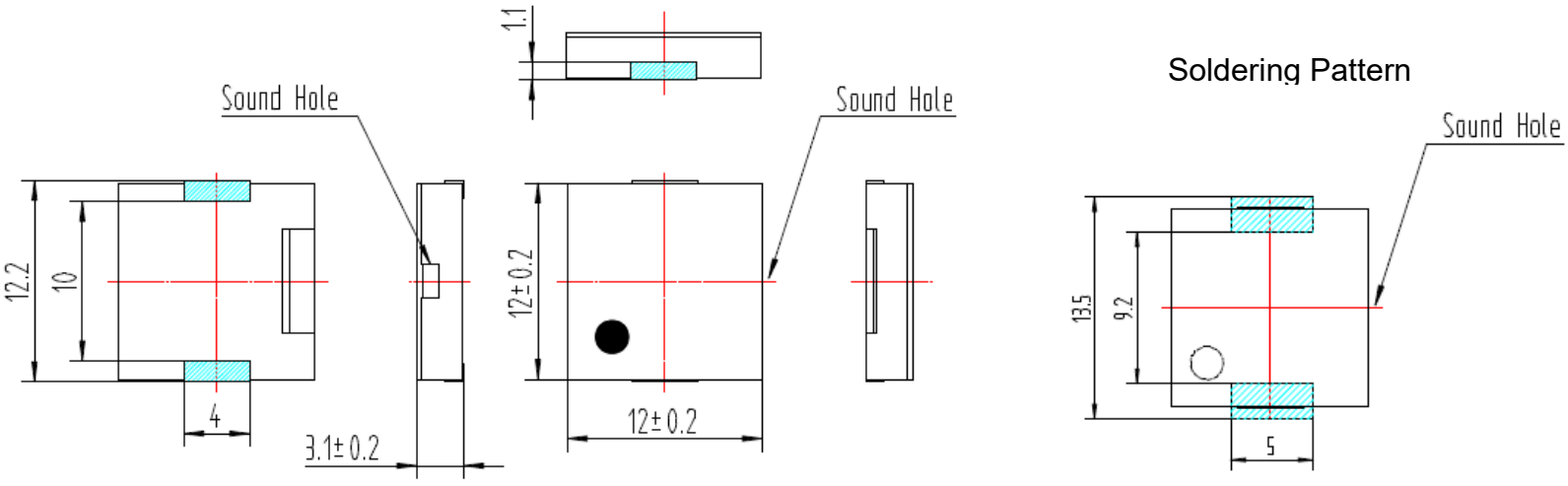
RDT-4.000-1212-ZF-NS1



Electrical Specifications

PARAMETERS		VALUE	UNIT
Resonant Frequency		4000	Hz
Operating Voltage		1 ~ 25	Vp-p
Capacitance	@ 1kHz	16000 ±30%	pF
Rated Current, max	@ 4kHz 50% duty Square Wave 3Vp-p	1	mA
Sound Output, min	@ 4kHz 50% duty Square Wave 3Vp-p, 10cm	75	dB
Operating Temperature Range		-40 ~ +105	˚C
Storage Temperature Range		-40 ~ +120	˚C
Weight		0.5	g

Dimension

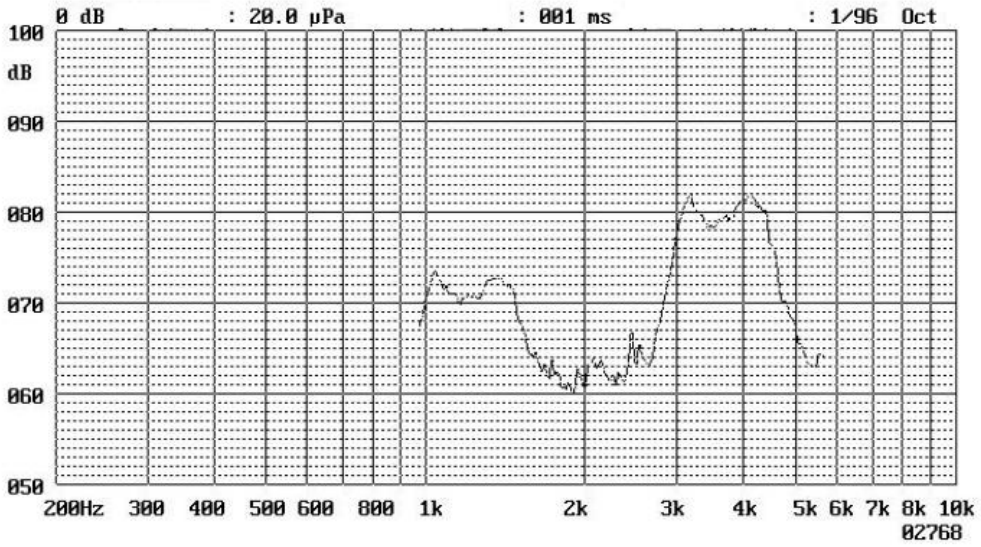


Unit: mm

Tolerance: ±0.3mm Except Specified
Housing Material: Black LCP
Terminal plate: 2 soldering pads, tin Plating Brass

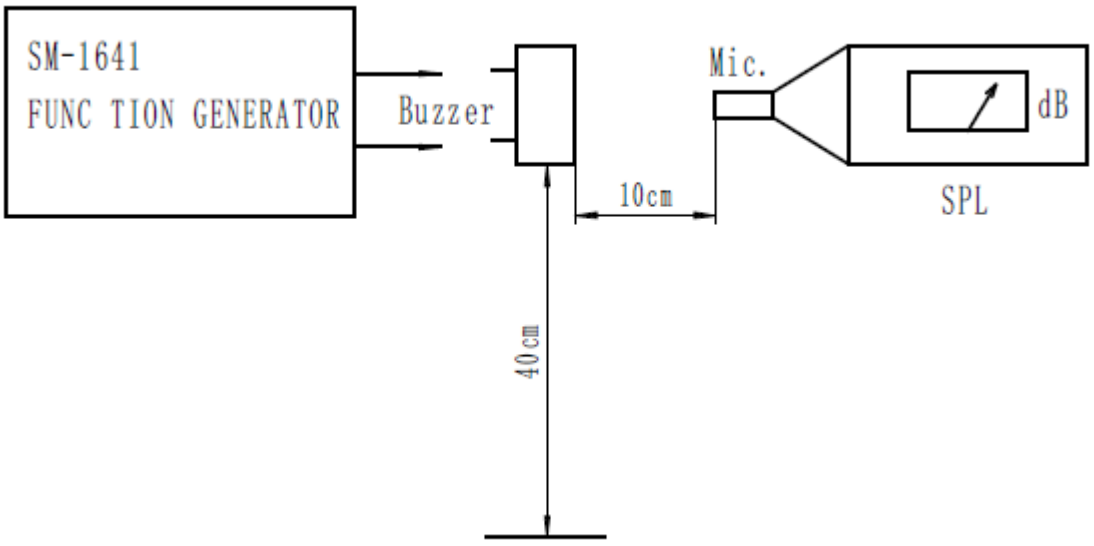
RALTRON ELECTRONICS ▪ 3075 N.W. 107th AVE ▪ Miami, Florida 33172 ▪ U.S.A.
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Frequency Characteristics



3Vp-p 50% duty Square wave,10cm

Electrical And Acoustical Measuring Condition



Reliability Test

All specifications must be satisfied after the test (Recovery:2 to 4 hours of recovery under the standard Condition after the removal from test chamber).

Ordinary Temperature Life Test
At 3Vp-p ,1minutes ON 1minutes OFF for 1000 hours in room temperature

High Temperature Test
No function at +120±2℃ for 240 hours, Function at +105±2℃ for 240 hours

Low Temperature Test
No function at -40±2℃ for 240 hours, Function at -40±2℃ for 240 hours

Humidity Test
Temperature:+40℃±2℃ Relative Humidity:95±5% for 240 hours

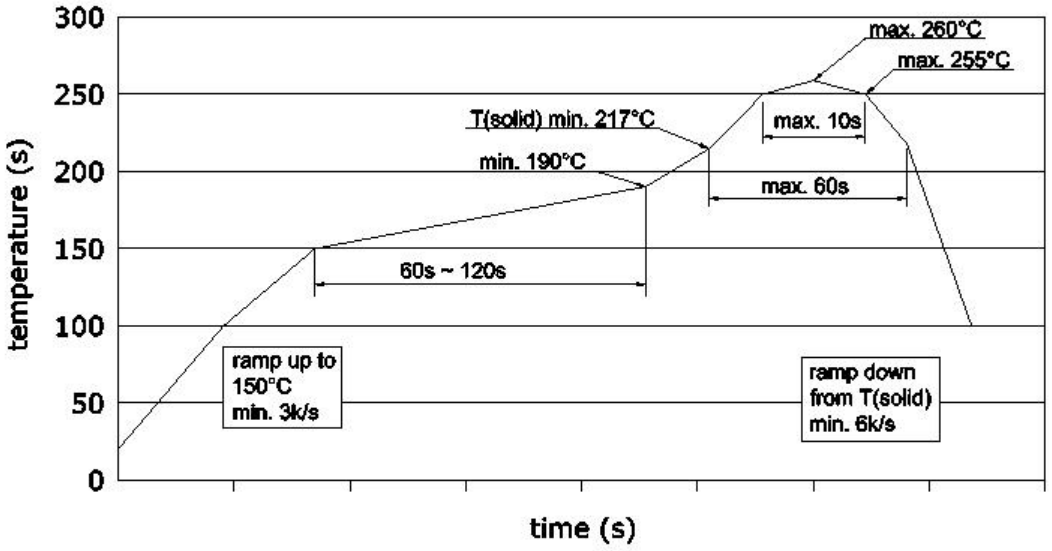
Temperature Shock Test
-40±2℃ /0.5hour→ +25±2℃/0.25hours→-+105±2℃/0.5hour→
+25±2℃/0.25hour Temperature Go up or Drop time is 0.5hour 3hours per 1cycle.Total is 5 cycles.

Drop Test
Dropped naturally from 750mm heigh onto the surface of 10mm wooden board. 2 directions-upper and Side of the part are applied.

Vibration Test
1.5mm with 10-50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours 980m/s (=100g) shock for each mutually perpendicular directions, halr sine wave ,3 times each

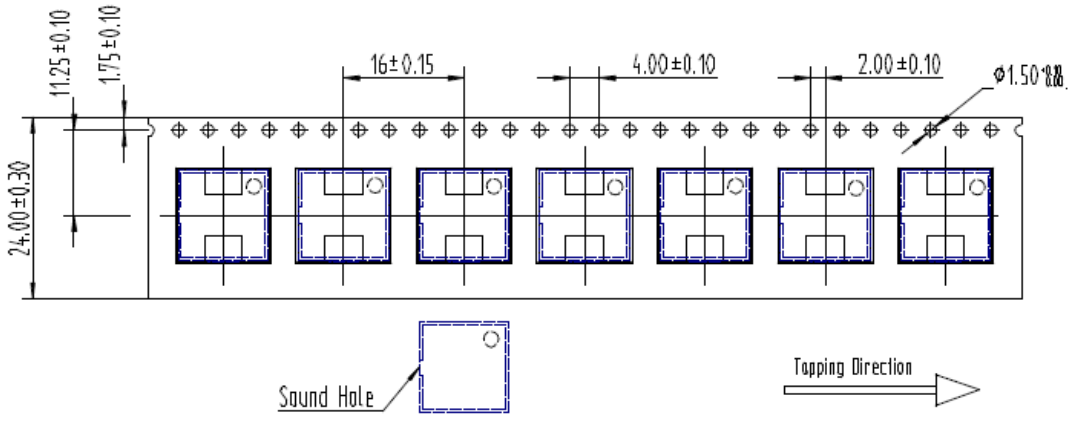
Reflow Test
Samples put through reflowing soldering oven 2 twice
Use recommendable reflow soldering condition
(1) No abnormality should be found after reflow
(2) 90% min. soldering pads shall be with solder.(except the edge of pad)
Samples put on PCB with solder paste through reflowing soldering oven 1 times
For a period of one year from date of manufacture under normal operations

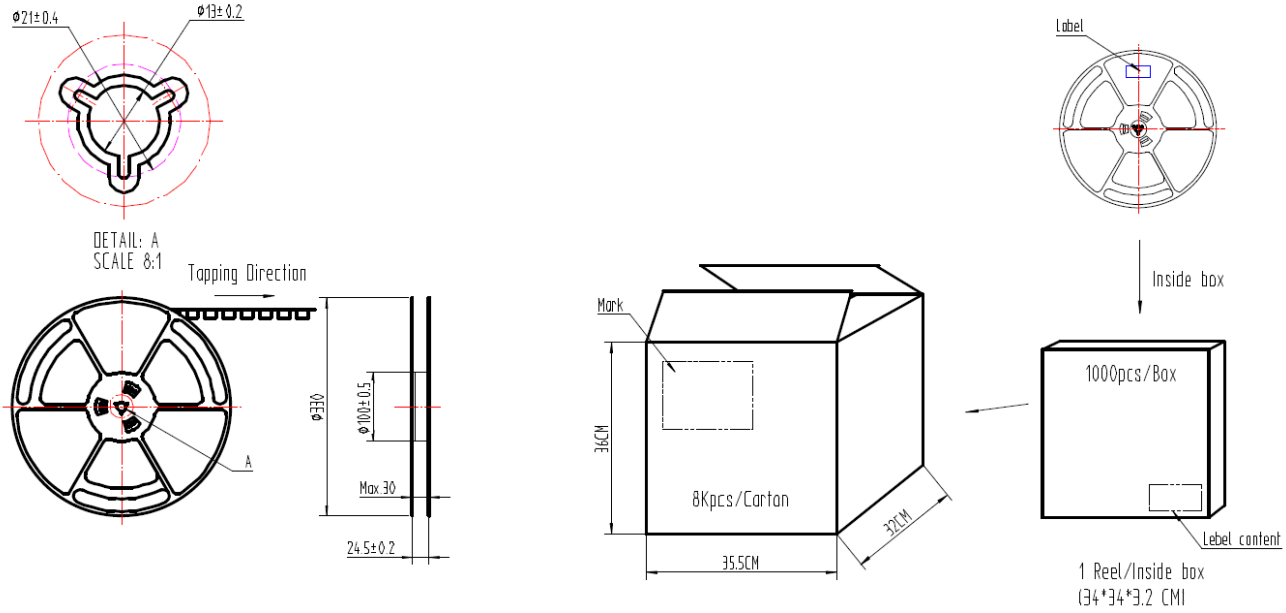
Recommendable Reflow Soldering



Recommended reflow oven temperature profile

Packing





- **APPROVAL**

DRAWN BY	AR, October 10, 2024
APPROVED BY	CP, October 10, 2024
REVISION	A, Initial Release
	B, Added Reliability Test and Packing information
	C, July 24, 2025 Updated the current Revision Levels

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