

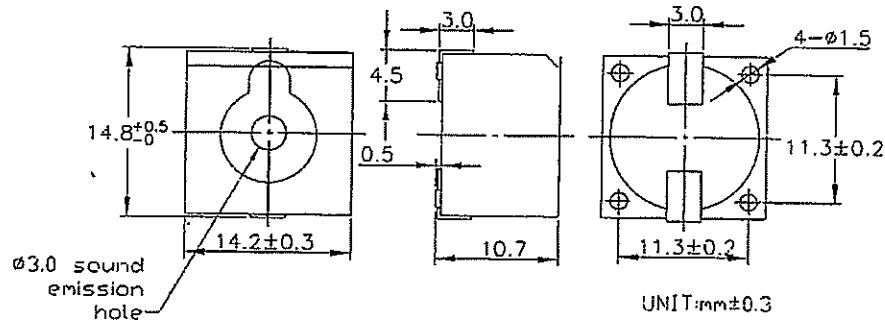
A: Scope

This specification applies to Piezo audio indicator TRSTP-1414


B: SPECIFICATION

No.	Item	Unit	Specification
1	Rated Voltage	Vp-p	10
2	Resonance Frequency	Hz	4300 +/- 500
3	Max Input Voltage	Vp-p	20
4	Rated current	mA	≤ 8
5	Capacitance at 120Hz	Pf	14000 +/- 30%
6	Sound Output	dB	≥ 90
7	Operating Temp	°C	-20~+70
8	Storage Temp	°C	-30~+80
9	Weight (MAX)	gram	2.3
10	Material		PPS
11	Environmental Protection Regulation		RoHS

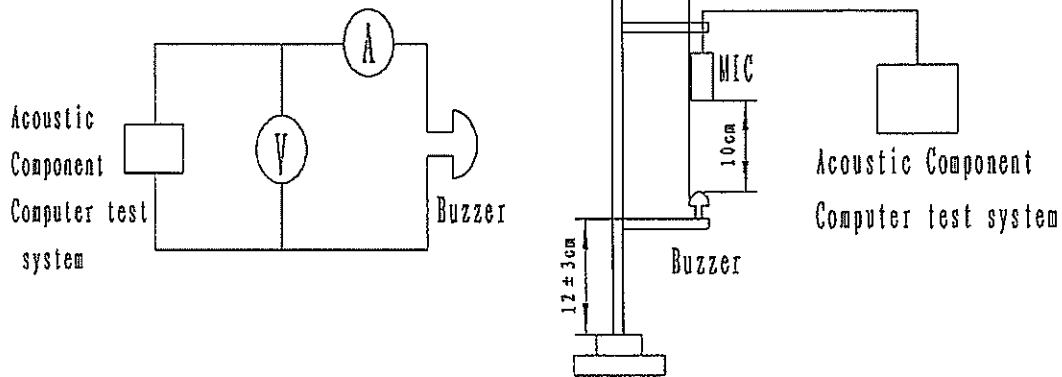
C: DIMENSIONS (Unit: mm)



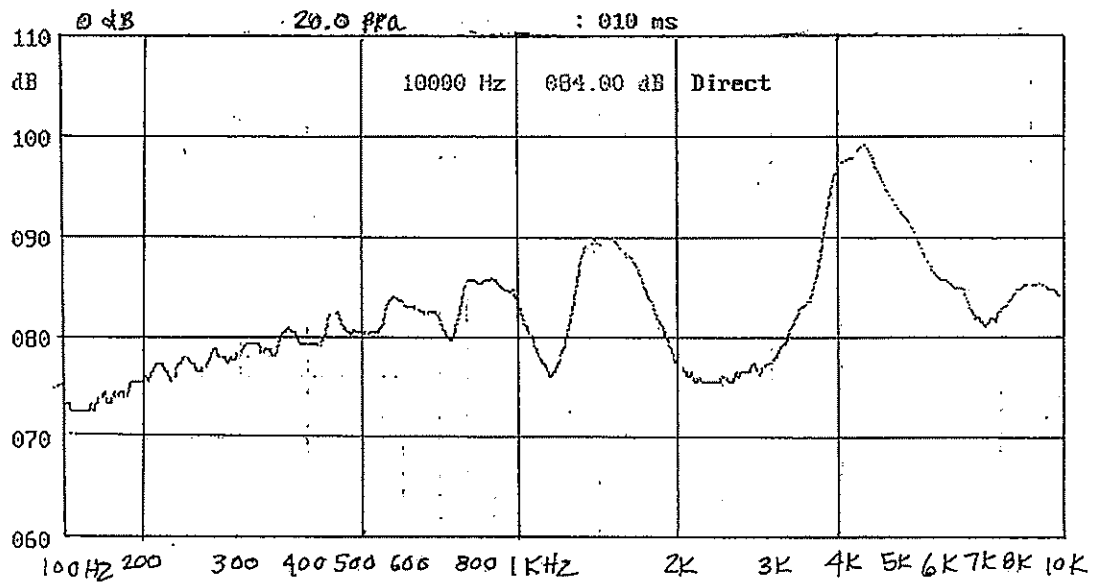
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Drawing Number: TRSTP-1414	Title: SMT PIEZO Audio Indicator
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D: TEST METHOD



E: FREQUENCY RESPONSE



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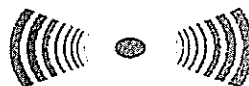
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F: RELIABILITY TEST

No.	Item	Test Conditions	Variance after test
1	High Temp Test	Part shall be capable of withstanding a storage temperature of +80 C for 120 hours.	All specifications must be satisfied after test
2	Low Temp test	Part shall be capable of withstanding a storage temperature of -30 C for 120 hours.	
3	Temp Cycle	The part shall be subjected to 5 cycles. One cycle shall consist of -30+/-2 C 30 minutes, 20+/-5 C 15 minutes, 80+/-2 C 30 minutes, 20+/-5 C 15 minutes	
4	Humidity Test	After being placed in a chamber at +40 C and 90~95% RH for 120 hours	
5	Vibration	Part shall be subjected to a vibration cycle 10 Hz for a period of 1 minute. Total peak amplitude shall be 1.52 mm (9.3g) The vibration test shall consist of 2hours per plane in each of 3 perpendicular directions for 6 hrs	
6	Shock	Sounder shall be measured after being applied shock (980m/s) for each three mutually perpendicular directions to each 3 times by half sine wave	
7	Drop Test	The part only shall be dropped naturally from a height of 700mm on to a 10mm thick wooden board. 2 directions upper and side of the part are to be applied.	
8	Lead Pull	Part shall be pushed 10+/-1 seconds with a force of 9.8N (1.0kg) behind the part	

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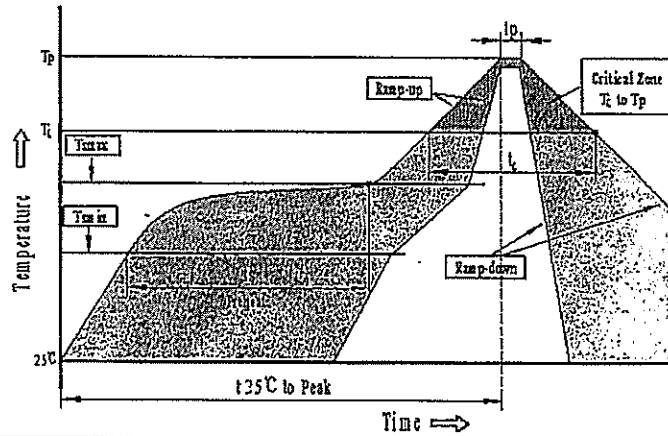
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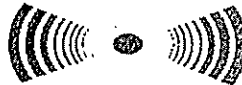
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G: Recommended Temp Profile for Reflow Oven



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to T_p)	3°C/second max.
Preheat	
- Temperature Min. (T_{smin})	150°C
- Temperature Min. (T_{smax})	200°C
- Temperature Min. (t_s)	60 ~ 180 seconds
T_{smax} to T_L	
- Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature (T_L)	217°C
- Time (T_L)	60 ~ 150 seconds
Peak temperature (T_p)	245°C+0/-5°C
Time within 5°C of actual Peak temperature (t_p)	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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