

SPECIFICATION FOR APPROVAL

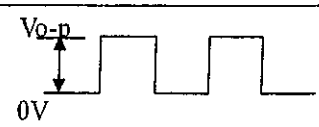
Product	MAGNETIC BUZZER
Part No.	SEM-1212S (RoHS)
Customer Approval	

Approved By	Checked By	Made By
ERIC WANG MAY-11-2007	DAVID LIU MAY-11-2007	JOHN HSU MAY-11-2007

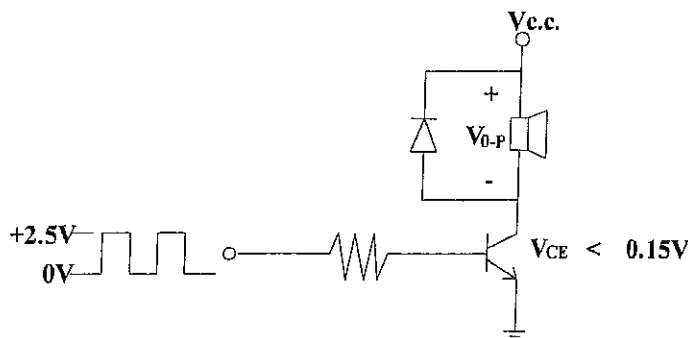


SHOGYO INTERNATIONAL CORP.
6851 JERICHO TURNPIKE, SYOSSET, N.Y. 11791
TEL: (516) 921-9111 • FAX: (516) 921-3777
www.shogyo.com

SEM-1212S (RoHS)

Items		Units	Specifications				Conditions
01	Rated Voltage	Vo-p	12.0				
02	Operating Voltage	Vo-p	8~16				
03	Mean Current	mA (Max)	40				Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
04	Direct Current Resistance	Ohm	140± 21.0				
05	Sound Output	dBA (min)	85				Distance at 10cm, applying rated voltage, rated frequency square wave, 1/2 duty subject to standard state.
06	Rated Frequency	Hz	2400± 200				
07	Operating Temp.	°C	-40 ~ +85				
08	Storage Temp.	°C	-50 ~ +95				
09	Dimension	mm	Φ	12	Height	9.5	See attached drawing.
10	Weight	Gram	2.0				
11	Terminal		Two Pins				See attached drawing.

※Standard Drive Circuit:



※Standard Conditions:

Temperature 15 ~ 35°C

Humidity 25 ~ 80 %

Air pressure 860 ~ 1060 HPa.

If the result is doubtful, should retested with the conditions below: Temp. 20±2°C, Humidity 60 ~ 70 %, Air pressure 860 ~ 1060 HPa.

Air pressure 860 ~ 1060 HPa.

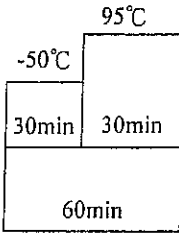
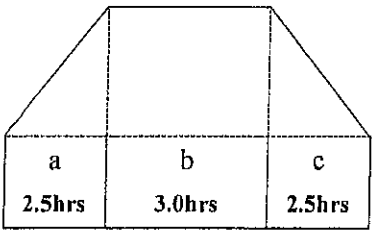
※Note: As this product is not protected from foreign material entering, please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. The functional degradation (e.g. SPL down) may occur if foreign material enter it.



SHOGYO INTERNATIONAL CORP.
6851 JERICHO TURNPIKE, SYOSSET, N.Y. 11791
TEL: (516) 921-9111 • FAX: (516) 921-3777
www.shogyo.com

RELIABILITY TEST

SEM-1212S(RoHS)

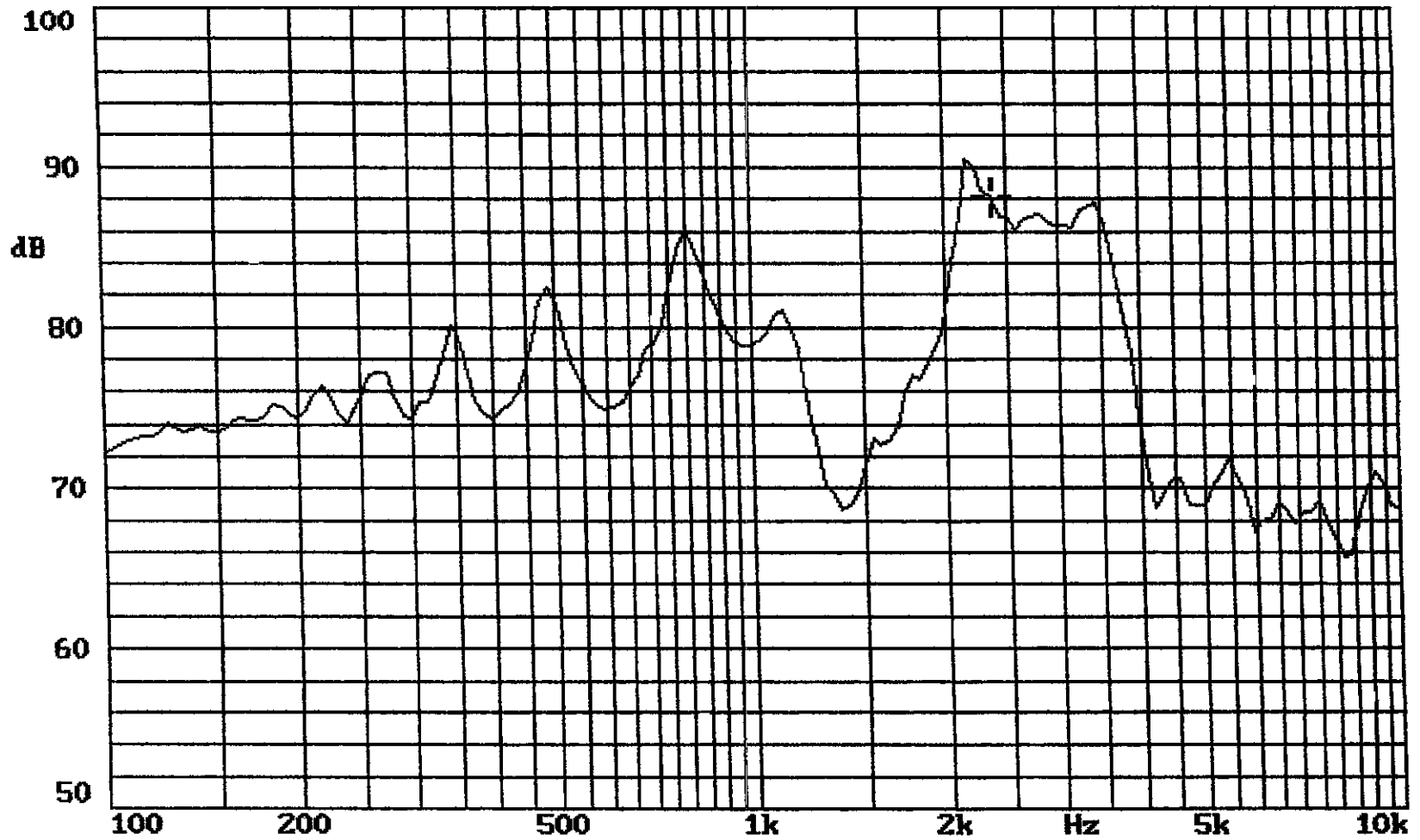
Item	Test conditions	Evaluation standard
01 High temp. Storage life	The part shall be capable of withstanding a storage Temperature of 95°C for 96 hours.	After the test the part shall meet specifications without Any degrance and performance except S.P.L S.P.L shall be 77dB or more.
02 Low temp. Storage life	The part shall be capable of withstanding a storage Temperature of -50°C for 96 hours.	
03 Temp.cycle	The part shall be subjected 10 cycles. One cycle shall consist of; <div style="text-align: center;">  </div>	
04 Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 8 hours and consist of; <div style="text-align: center;">  <p>a,b:90~98%RH c :80~98%RH</p> </div>	



Item	Test conditions	Evaluation standard	
05	Vibration	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time Of 6 hours.	SEM-1212S(RoHS)
06	Fixed drop	The part shall be mounted on 100g jig(standard pc board) and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes. (a total of 30 times)	After the test the part shall meet specifications
07	Free drop	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).	without Any degraance and performance except S.P.L
08	Operating life	<ol style="list-style-type: none"> 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature ($25 \pm 10^{\circ}\text{C}$) with 12V 2400Hz applied. 2. High temperature The part shall be subjected to 500 hours at 85°C with 12V, 2400Hz applied. 3. Low temperature The part shall be subjected to 500 hours at -40°C with 12V, 2400Hz applied. 	S.P.L shall be 77dB or more.



SEM-1212S(RoHS)

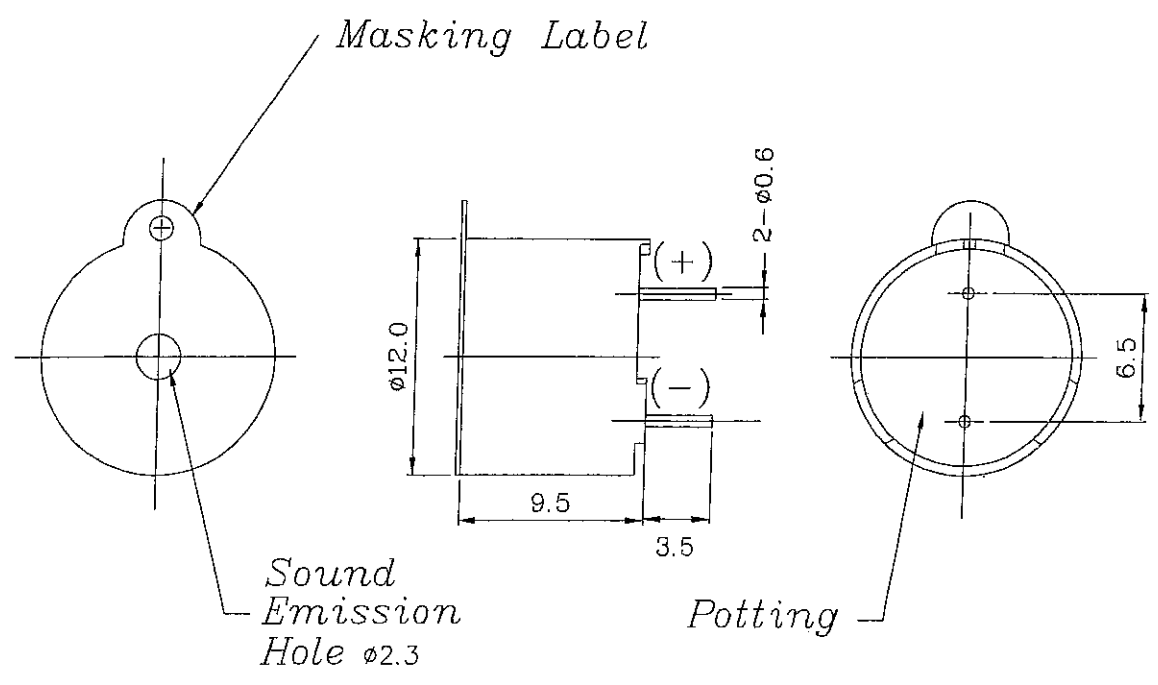


Mode: SSR



SHOGYO

SHOGYO INTERNATIONAL CORP.
6851 JERICHO TURNPIKE, SYOSSET, N.Y. 11791
TEL: (516) 921-9111 • FAX: (516) 921-3777
www.shogyo.com



RoHS

TITLE: SOUND TRANSDUCER DIMENSIONS		DRAWN: <i>Jodie</i> 02/01/2000	SCALE: 3/1 SHEET: 1 OF 1
PART NO. SEM-1212S		DESIGNED: R&D	UNITS: mm
1	CHECKED:	TOLERANCE ± 0.5	
	APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL \pm ***	
REV	MATERIAL: PBT	TWO PLACE DECIMAL \pm *** THREE PLACE DECIMAL \pm ***	



SHOGYO INTERNATIONAL CORP.
 6851 JERICHO TURNPIKE, SYOSSET, N.Y. 11791
 TEL: (516) 921-9111 • FAX: (516) 921-3777
www.shogyo.com