

SPECIFICATION FOR APPROVAL

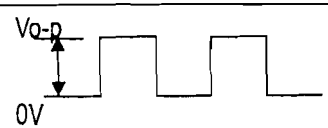
Product	MAGNETIC BUZZER
Part No.	SEM-111B-42(RoHS)
Customer Approval	

Approved By	Checked By	Made By
ERIC Jan. 26,2011	EMILY Jan. 26,2011	LILY Jan. 26,2011



1. Specifications

SEM-111B-42 (RoHS)

Items	Units	Specifications	Conditions	
01	Rated Voltage	Vo-p	1.5	
02	Operating Voltage	Vo-p	1.0~2.0	
03	Consumption Current	mA	Mean 15	Applying rated voltage, rated frequency Square wave, 1/2 duty subject to standard state.
		(Max)	Peak 45	
04	Direct Current Resistance	Ohm	40±6.3	
05	Inductance	mH	3±2	
05	Sound Output	dBA (min)	70	Distance at 10cm, applying rated voltage, rated frequency square wave, 1/2 duty subject to standard state.
06	Rated Frequency	Hz	2048	
07	Operating Temp.	°	-40 ~ +85	
08	Storage Temp.	°	-50 ~ +95	
09	Weight	Gram	2.0	

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

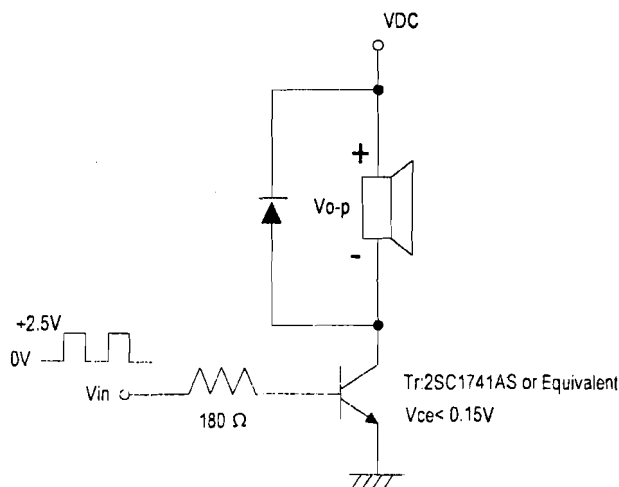
JUDGEMENT

Temperature : 20±3°

Relative humidity : 60% ~ 70%,

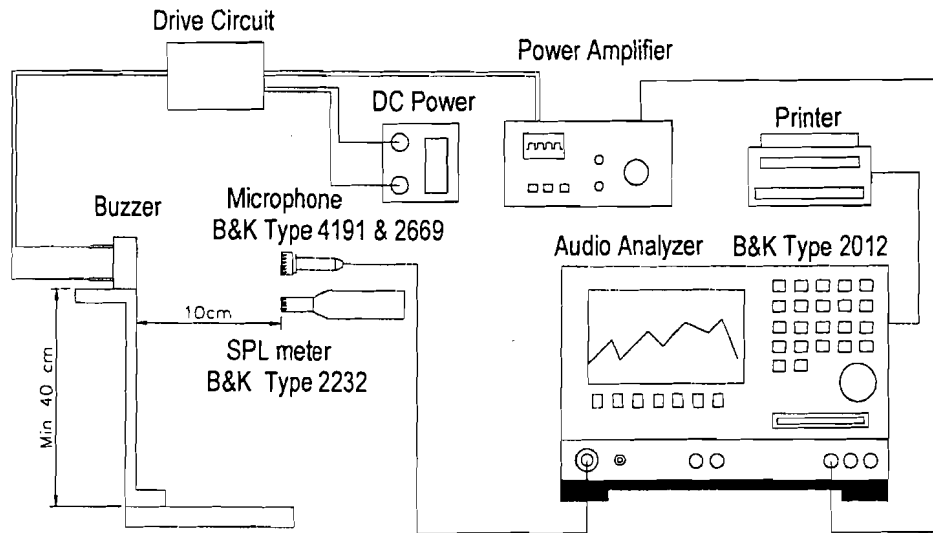
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Drive Circuit:



2-3. Standard Test Fixture

SEM-111B-42



2-4. Frequency Response Curve



SHOGYO INTERNATIONAL CORP.
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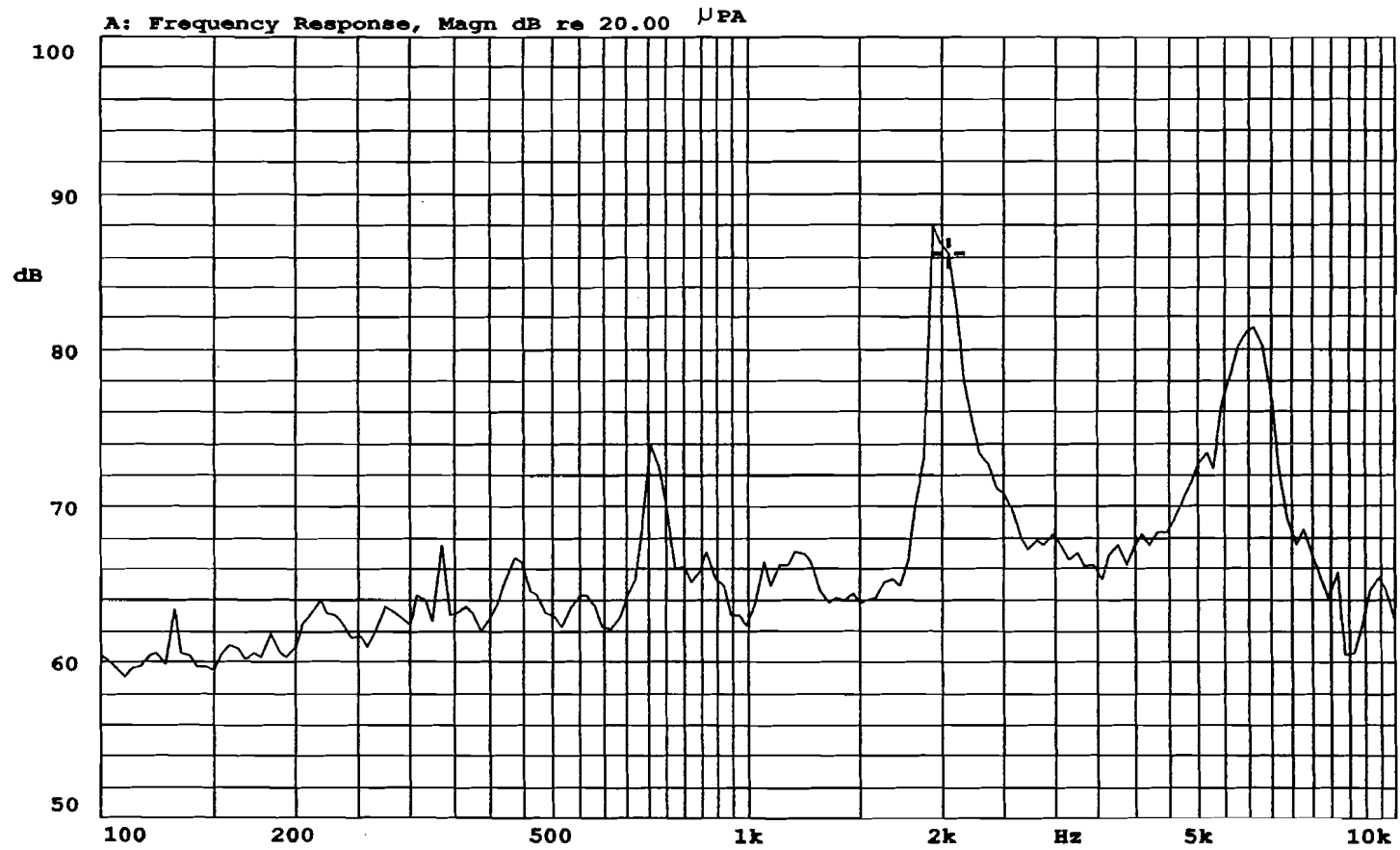
X:2.0535kHz

Y:86.20dB

ZA:Live Curve

SSR T. RMS

SEM-111B-42



Mode: SSR



SHOGYO

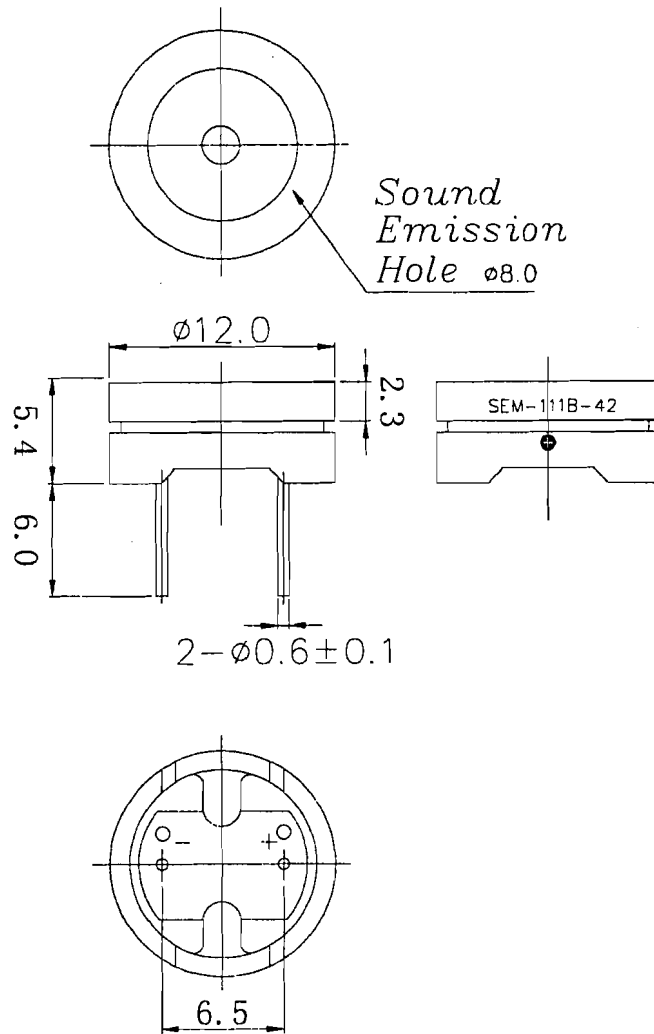
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REV NO.

REVISION NOTE

APPROVAL

DATE



RoHS

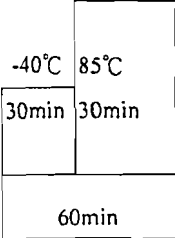
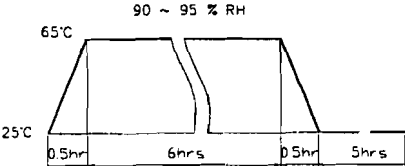
TITLE: SOUND TRANSDUCER		DRAWN: Lily	2009/12/03	SCALE: 2:1	SHEET: 1 of 1
PART NO. SEM-111B-42		DESIGNED: R & D		UNITS: mm	TOLERANCE ± 0.5
DWG NO.		CHECKED:		UNLESS OTHERWISE SPECIFIED	
		APPROVAL:		ONE PLACE DECIMAL ± ...	
REV 1		MATERIAL: PPO		TWO PLACE DECIMAL ± ...	
				THREE PLACE DECIMAL ± ...	



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4. RELIABILITY TEST

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Item	Test conditions	Evaluation standard
01 High temp.Storage life	The part shall be capable of withstanding a storage Temperature of 95° for 96 hours.	
02 Low temp.Storage life	The part shall be capable of withstanding a storage Temperature of -50° for 96 hours.	
03 Temp. cycle	<p>The part shall be subjected 10 cycles. One cycle shall consist of;</p> 	
04 Temp./Humidity cycle	<p>The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of;</p> 	<p>After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 78dB or more.</p>
05 Operating life	<p>Rated Voltage, Frequency applied.</p> <ol style="list-style-type: none"> 1. Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10°) 1. High temperature The part shall be subjected to 500 hours at 85° 2. Low temperature The part shall be subjected to 500 hours at -40° 	
06 Lead Strength	Pull load on the direction of the lead axis for 10 ±1 sec.	
07 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.	



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Item	Test conditions	Evaluation standard
08	Fixed drop	The part shall be mounted on 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)
09	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).
10	Solder heat resistance	Soldering into solderbath : 350±5 Soaking time : 3.5±0.5 sec
11	Solder ability	Soldering : 250±5 / 5 Sec. 350±5 / 1.5 Sec Soldering t into solderbath : 250±5 Soaking time : 2±0.5 sec
12	Lead strength	Pull lead with a force of 10N, on the direction of the lead axis for 10 : 10±1 sec
13	Washability	Solvent : deionized water Solvent temp. : 55±5 Soaking time : 5±0.5 min.
		After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 78dB or more.

