



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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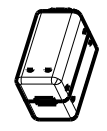
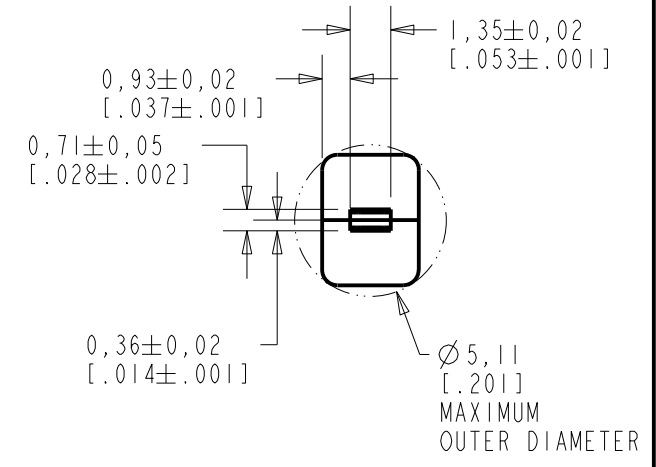
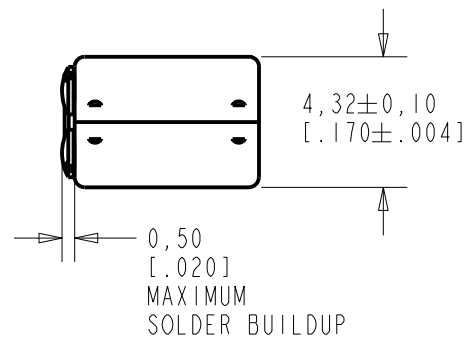
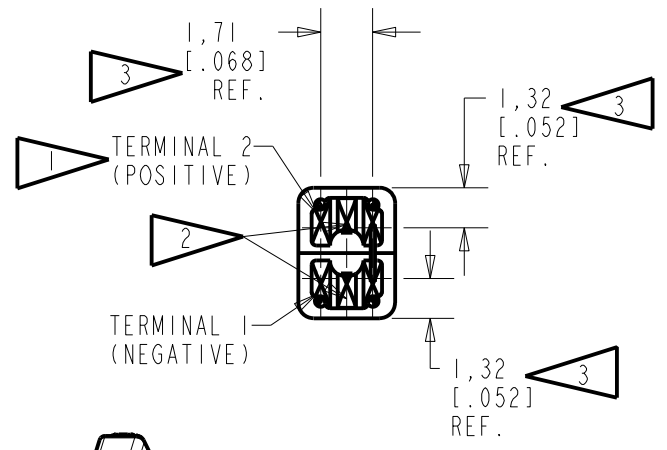
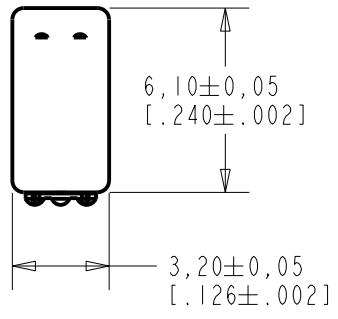
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



GR-31711-000
SHT 1.1

NOTES:

- 1 A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.
- 2 TERMINAL ELECTRICALLY CONNECTED TO CASE.
- 3 DIMENSION TO APPROXIMATE CENTER OF TERMINAL PAD.



SCALE 2:1
NOMINAL WEIGHT 0.24 GRAMS
DIMENSIONS IN MILLIMETERS [INCHES]

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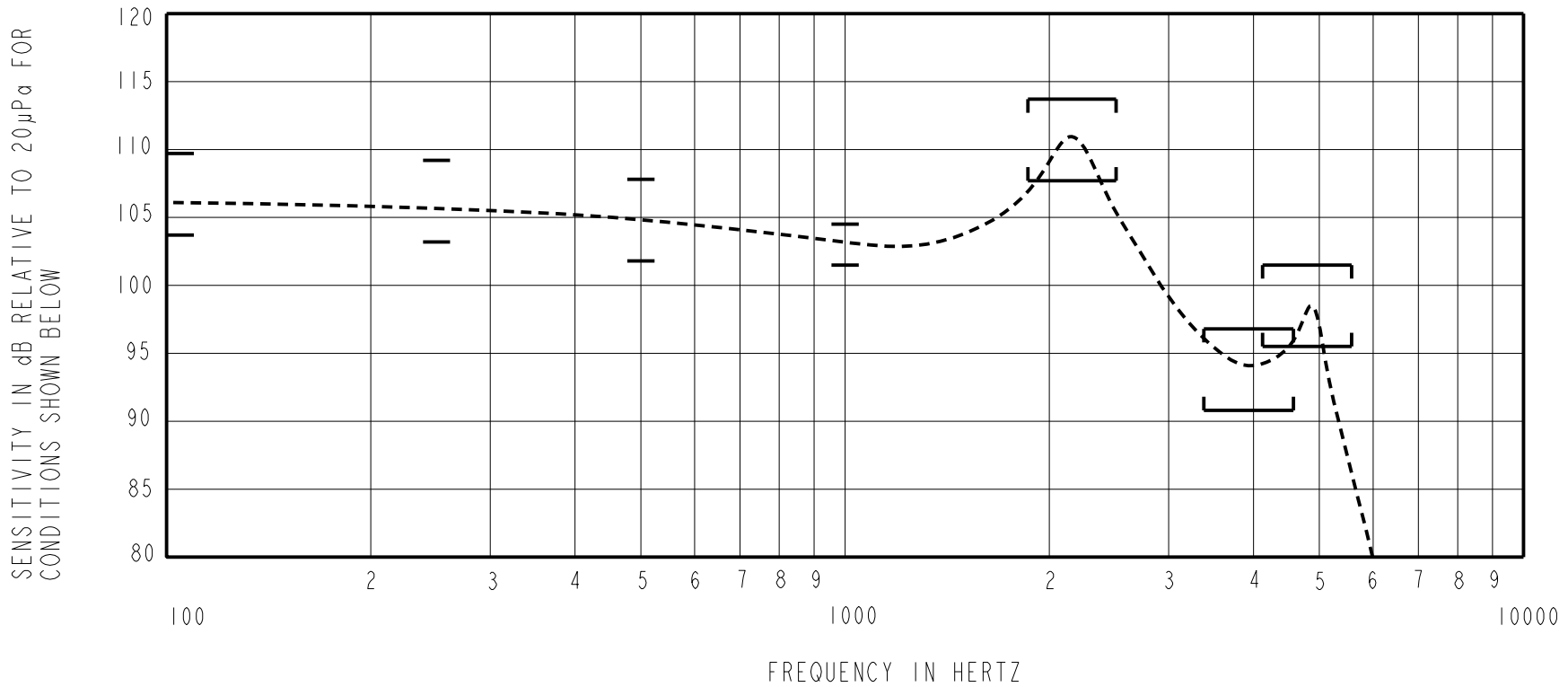
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10114167	9-21-12	Active	C
B	C10114045	8-29-12		
A	C10113749	7-18-12		
SCALE: 4:1			DR. BY DATE	
DO NOT SCALE DRAWING			LSY 7-18-12	
TITLE: RECEIVER		GR-31711-000	CK. BY DATE	
OUTLINE DRAWING		SHT 1.1	GJP 7-20-12	
			APP. BY DATE	
			GJP 7-20-12	

THIS IS A PAIR OF RECEIVERS WITH VERY LOW VIBRATION IN ALL DIRECTIONS, AND A QUADRAPOLE MAGNETIC RADIATION PATTERN.

NO DAMPING

CR-31711-000
SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

SENSITIVITY DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 4. NOMINAL SENSITIVITY AT 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

LIMIT TYPE	FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
REL	100	+0.7	+3.7	+6.7
REL	250	+0.2	+3.2	+6.2
REL	500	-1.2	+1.8	+4.8
REF	1000	-1.5	103.0	+1.5
PEAK1	1860 - 2510	+4.7	+7.7	+10.7
VALLEY1	3380 - 4580	-12.2	-9.2	-6.2
PEAK2	4125 - 5580	-7.5	-4.5	-1.5

TABLE 1

TOTAL HARMONIC DISTORTION DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	AC DRIVE (Vrms)	DC BIAS (V)	LIMIT (%)
1/3 PEAK1 (TYP. 705)	0.094	0	3
1/2 PEAK1 (TYP. 1058)	0.094	0	3
1/3 PEAK1 (TYP. 705)	0.265	0	8
1/2 PEAK1 (TYP. 1058)	0.265	0	8

TABLE 2

MAXIMUM OUTPUT LEVEL

FREQUENCY	THD(%)	AC DRIVE (Vrms)	SPL MINIMUM (dB)
500Hz	5	1.305	114.0
PEAK	6	1.305	130.3

TABLE 3

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.094 Vrms, 0 mA DC BIAS
MAXIMUM DRIVE VOLTAGE	1.305 Vrms
SOURCE IMPEDANCE	<1 Ohm
TUBING	10 mm [.394"] LONG X 1 mm [.039"] I.D. ("ITE")
COUPLER CAVITY	2 CM ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 4

ELECTRICAL

DC RESISTANCE @ 20°C	29.0 Ohms ± 10%
IMPEDANCE @ 500 Hz	39.5 Ohms ± 15%
IMPEDANCE @ 1 kHz	63.0 Ohms ± 15%
INDUCTANCE @ 500 Hz	7.1 mH TYPICAL
CAPACITANCE @ 10 MHz	2.8 pF TYPICAL

TABLE 5

ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM THE COIL CIRCUIT.

MECHANICAL

PORT LOCATION: 12N

SOLDER TYPE: SAC305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN +1/-3 dB AT 500 Hz FROM -17°C TO 63°C

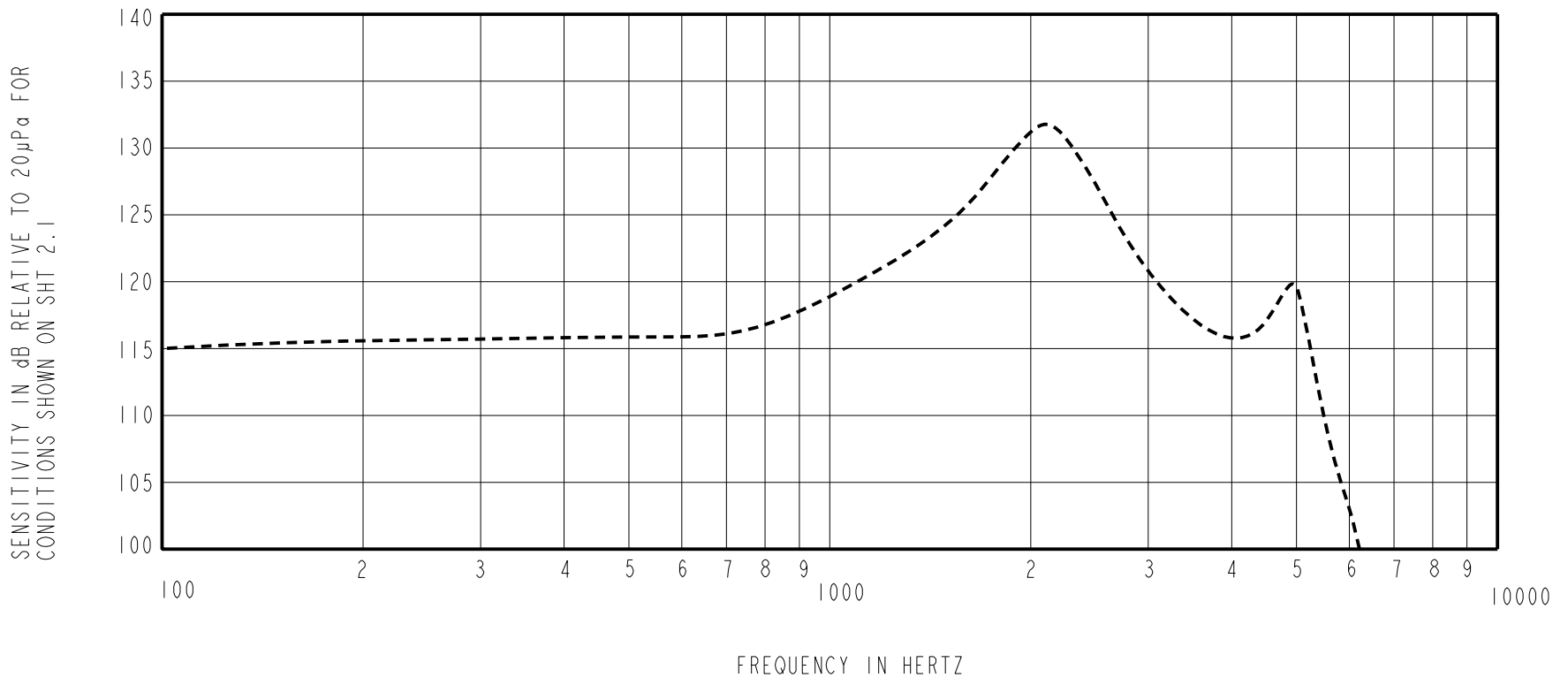
STORAGE: -40°C TO 63°C

SHOCK RESISTANCE: 90% SURVIVAL RATE WITH THD @ 1/3 PEAK FREQUENCY LESS THAN 10%, THD @ 1/2 PEAK FREQUENCY LESS THAN 20% AND LESS THAN 3dB CHANGE IN SENSITIVITY AT 1kHz WHEN SUBJECTED TO 14,100 G.

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A	C10113749	7-18-12		
WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION			DR. BY	DATE
TITLE: RECEIVER PERFORMANCE SPECIFICATION			LSY	7-18-12
			CR-31711-000	
SHT 2.1			CK. BY	DATE
			GJP	7-20-12
			APP. BY	DATE
			GJP	7-20-12

TYPICAL OUTPUT - 5% THD AND 1.305 V LIMITED



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	LSY	7-18-12
	CK. BY	DATE
	GJP	7-20-12
TITLE:	RECEIVER	CR-31711-000
	PERFORMANCE SPECIFICATION	SHT 2.2
	APP. BY	DATE
	GJP	7-20-12

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