



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!



## Contact us

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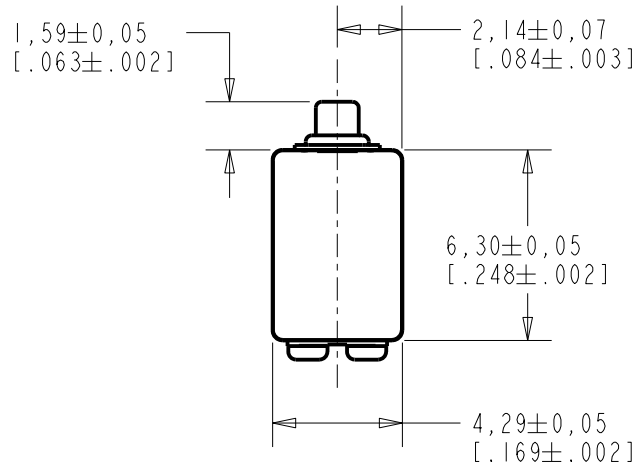
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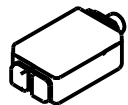
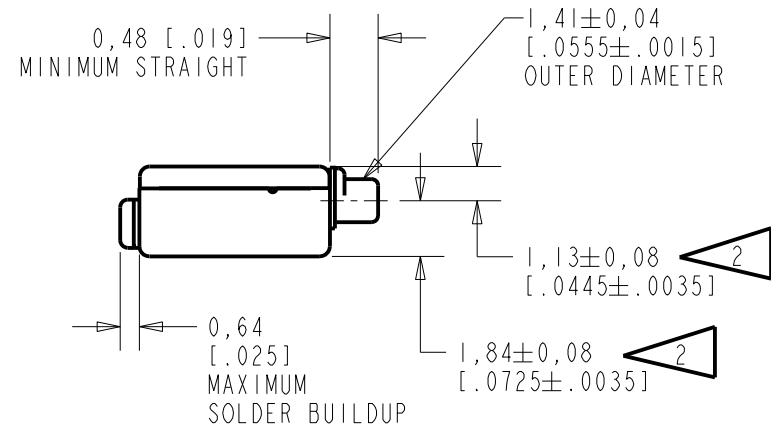
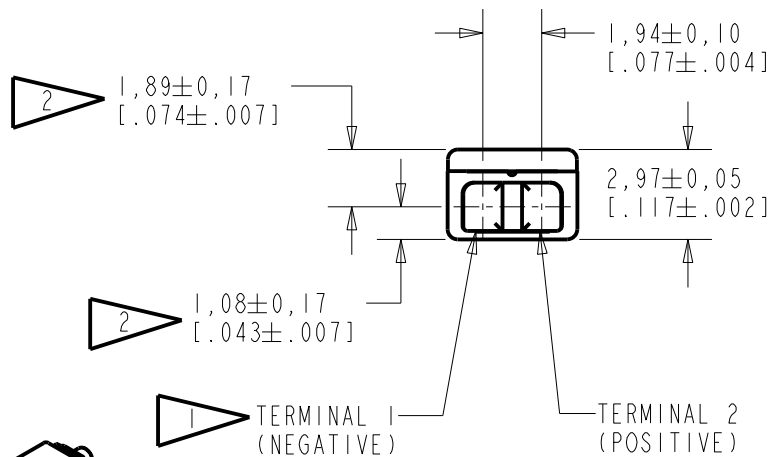
ED-23994-000

SHT 1.1



NOTE:

- 1 A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.
- 2 LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO ±0,17 [.007].



SCALE 2:1

NOMINAL WEIGHT  
.31 GRAM

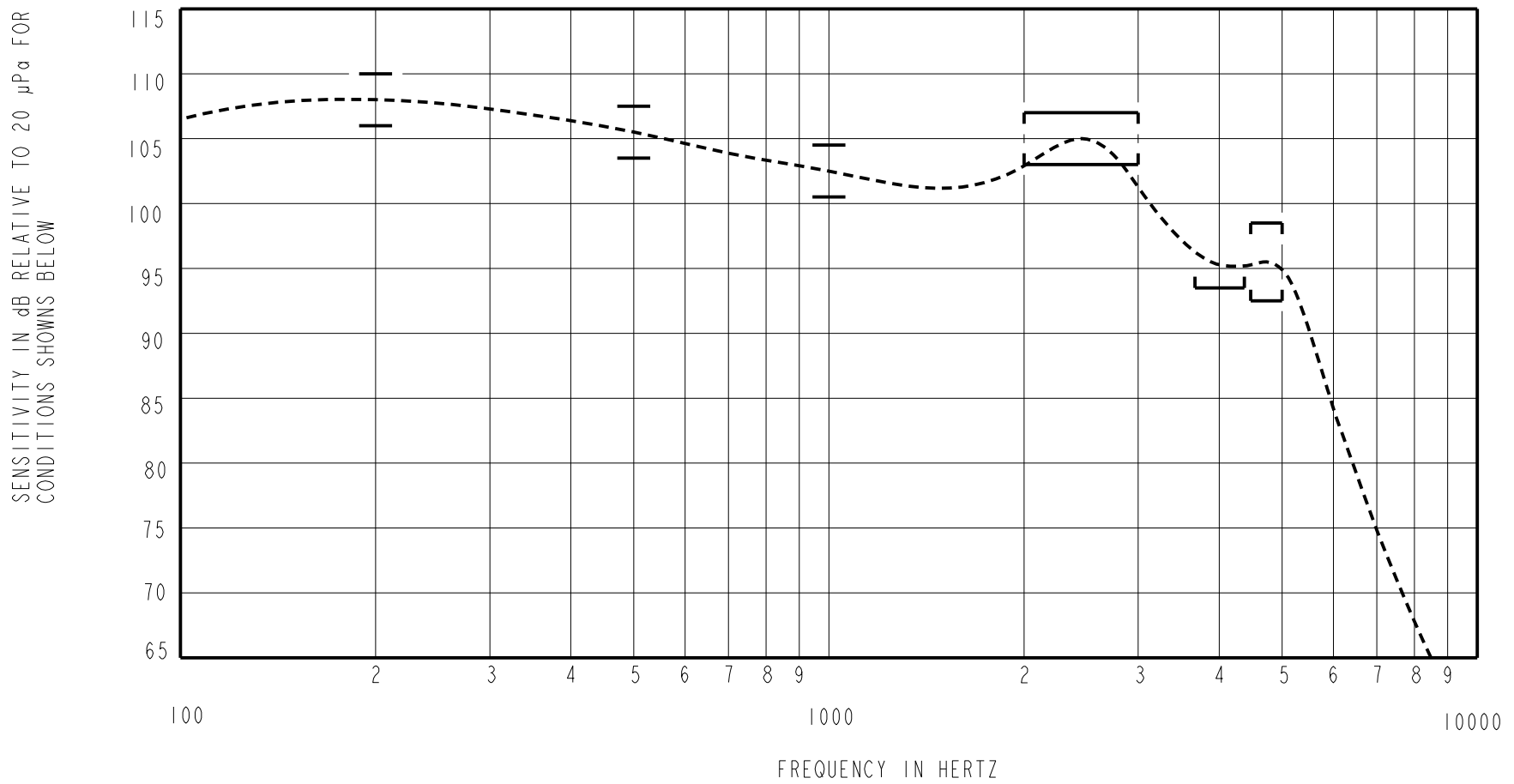
DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10113486	5-17-12	Active	C
B	C10107990	8-20-08		
A	C10103825	1-24-06		

SCALE: 2:1		DR. BY	DATE
DO NOT SCALE DRAWING		CRG	1-24-06
TITLE: RECEIVER		ED-23994-000	CK. BY
OUTLINE DRAWING		SHT 1.1	DATE
		GJP	1-25-06
		APP. BY	DATE
		GJP	1-25-06

**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

CONSTANT VOLTAGE DRIVE CONDITIONS



**ACOUSTICAL**

SENSITIVITY  
DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3.  
NOMINAL SENSITIVITY AT 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES  
IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	+3.5	+5.5	+7.5
500	+1.0	+3.0	+5.0
1000	-2.0	102.5	+2.0
2000-3000	+0.5	+2.5	+4.5
3700-4400	-9.0	---	-1
4500-5000	-10.0	-7.0	-4.0

TABLE 1

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

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (mA)	LIMIT (%)
500	0.571	0	10
780	0.204	0	5
1175	0.204	0	5

TABLE 2

**TEST CONDITIONS**

NOMINAL SOURCE VOLTAGE	0.204 V rms, 0mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 3

**ELECTRICAL**

DC RESISTANCE	43 OHMS ± 10%
IMPEDANCE @ 500 Hz	80 OHMS ± 15%
IMPEDANCE @ 1 kHz	138 OHMS ± 15%

TABLE 4

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

PORT LOCATION: 12C

SOLDER TYPE: SAC305  
TEMPERATURE

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

STORAGE: -40°C TO 63°C

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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

TITLE: **RECEIVER**  
PERFORMANCE SPECIFICATION

**ED-23994-000**  
**SHT 2.1**

DR. BY	DATE
CRG	1-24-06
CK. BY	DATE
GJP	1-25-06
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