



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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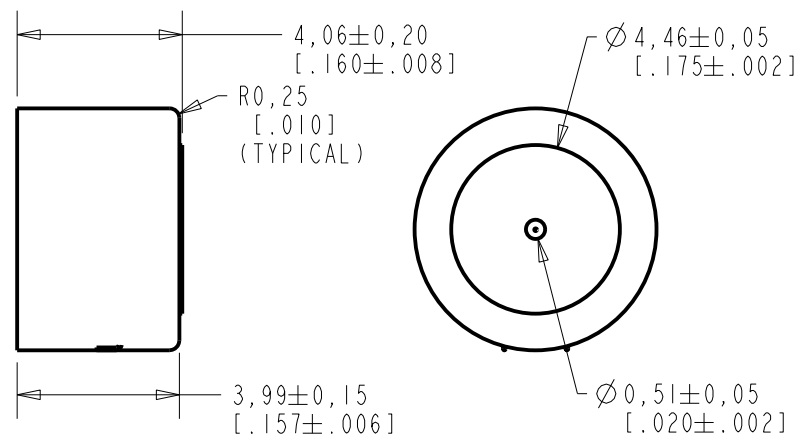
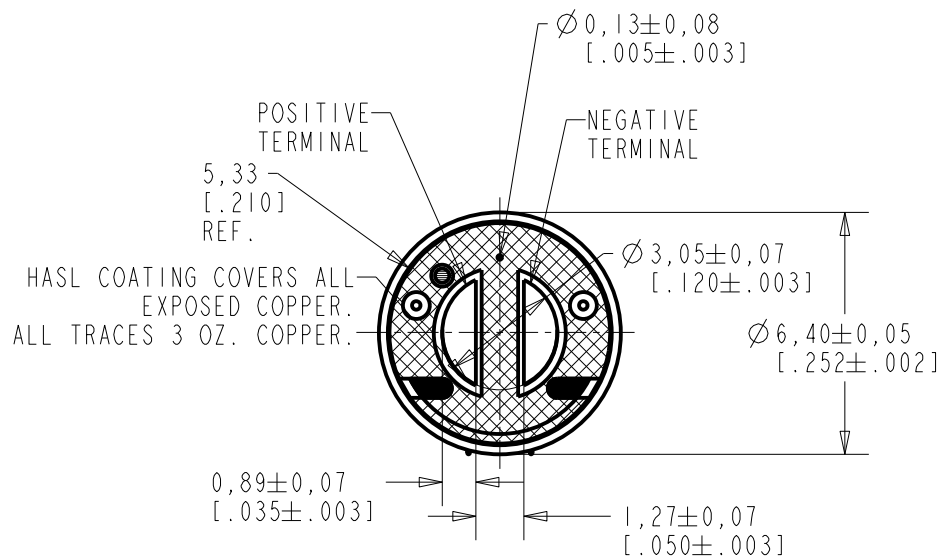


SR-32453-000

SHT 1.1

NOTES:

1 A POSITIVE GOING VOLTAGE AT THE POSITIVE TERMINAL, RELATIVE TO NEGATIVE TERMINAL, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.



SCALE 2:1

NOMINAL WEIGHT  
0.26 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	CI0116604	12-26-14	Active	C
B	CI0116253	9-25-14		
A	CI0115858P	7-10-14		

SCALE: 5:1		DR. BY: SSUN	DATE: 7-10-14
DO NOT SCALE DRAWING			
TITLE: RECEIVER		SR-32453-000	
OUTLINE DRAWING		SHT 1.1	
		CK. BY: GJP	DATE: 7-10-14
		APP. BY: GJP	DATE: 7-10-14

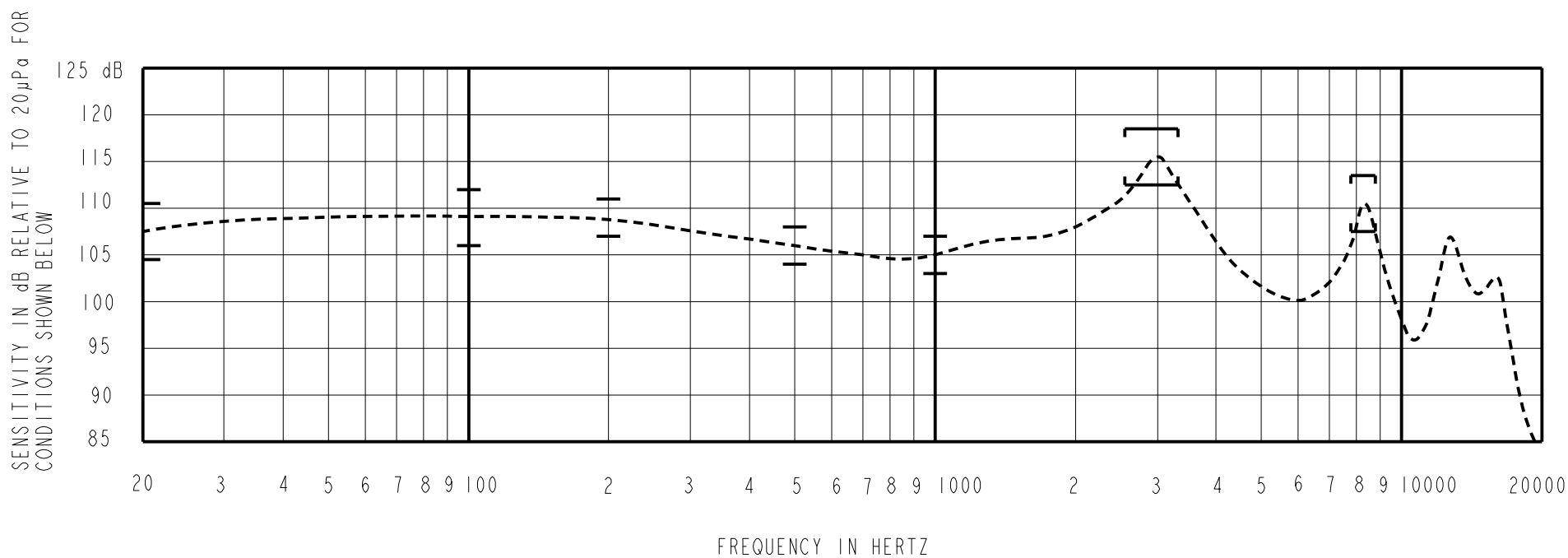
THE SR-32453-000 IS A MAGNETIC BALANCED ARMATURE RECEIVER OPTIMIZED FOR USE IN EARPHONES.

NO DAMPING

SR-32453-000

SHEET 2.1

NOTE: SPECIFICATIONS FOLLOWED BY AN ASTERISK (\*) ARE 100 % TESTED



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.

LIMIT TYPE	FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
REL	20	-0.5	+2.5	+5.5
REL	100	+1.0	+4.0	+7.0
REL	200	+2.0	+4.0	+6.0
REL	500	-1.0	+1.0	+3.0
REF	1000	-2.0	105.0	+2.0
PEAK	2550-3350	+7.5	+10.5	+13.5
PEAK	7800-8800	+2.5	+5.5	+8.5

TABLE 1

MECHANICAL CHARACTERISTICS

SOLDER TYPE: SAC305 (LEAD FREE)  
 SOLDERING TEMPERATURE: 400°C FOR 2 SECONDS MAX.  
 STORAGE TEMPERATURE: -40°C TO 63°C  
 OPERATING TEMPERATURE: 0°C TO 63°C

AT EXTREME ENDS OF THE OPERATING TEMPERATURE THE SENSITIVITY WILL NOT VARY MORE THAN ±3 dB FROM ROOM TEMPERATURE

TOTAL HARMONIC DISTORTION

DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (V)	MAX (%)
1/3 PEAK (TYP. 964)	0.1	0	5
1/2 PEAK (TYP. 1446)	0.1	0	5
1/3 PEAK (TYP. 964)	0.3	0	10
1/2 PEAK (TYP. 1446)	0.3	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.1 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	7mm [.236"] LONG, 2.2mm [.039"] I.D.
COUPLER CAVITY	IEC 60318-4 ("711") COUPLER

TABLE 3

ELECTRICAL

DC RESISTANCE	25.0 Ohms ± 10%
IMPEDANCE @ 500 Hz	32.5 Ohms ± 15%
IMPEDANCE @ 1 KHz	46.0 Ohms ± 20%

TABLE 4

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10116604	12-26-14	Active	C
B	C10116253	9-25-14		
A	C10115858P	7-10-14		

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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

**SR-32453-000**  
 SHT 2.1

DR. BY	DATE
SSUN	7-10-14
CK. BY	DATE
GJP	7-10-14
APP. BY	DATE
GJP	7-10-14