



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

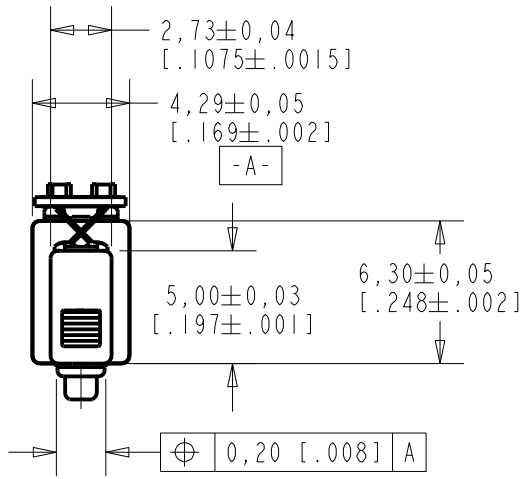
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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

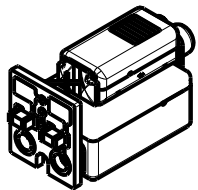
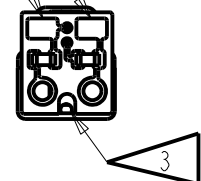
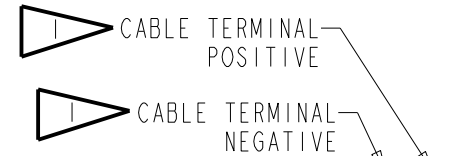
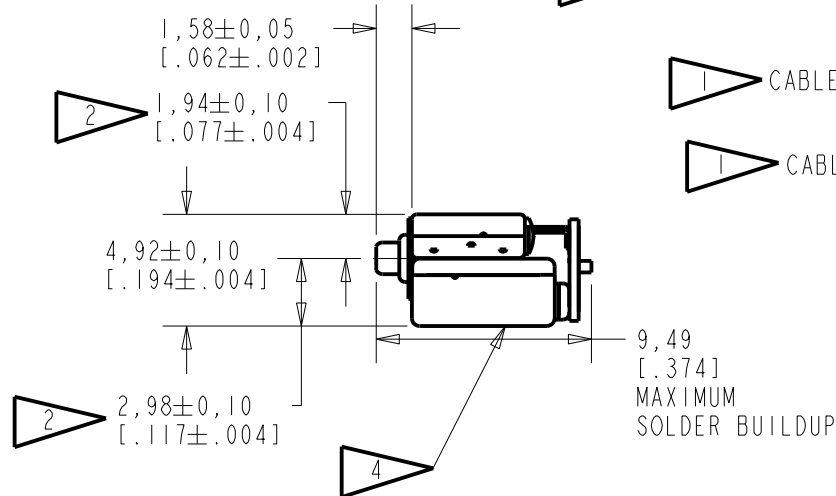
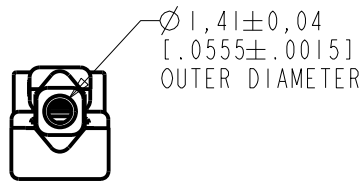


**GO-30783-000**  
SHT 1.1



NOTES:

- 1 A POSITIVE GOING VOLTAGE AT THE POSITIVE TERMINAL RELATIVE TO THE NEGATIVE TERMINAL 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.
- 3 BACK VENT HOLE TO BE CLEAN AND CLEAR OF DEBRIS.
- 4 LASER MARK ON OUTSIDE OF ED CUP.



DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			<b>Active</b>	<b>D</b>
D	CI0116006	6-6-14		
SCALE: <b>3:1</b>				
TITLE: <b>RECEIVER</b>			DR. BY DATE	
OUTLINE DRAWING			MMM 7-28-09	
<b>GO-30783-000</b>			GJP 7-30-09	
<b>SHT 1.1</b>			APP. BY DATE	
			GJP 7-30-09	

UNDAMPED MAGNETIC BALANCED ARMATURE RECEIVERS INTENDED FOR USE AS THE HIGH AND LOW FREQUENCY DRIVERS IN A Hi Fi SYSTEM. THE GQ RECEIVER COMBINES A WBFK AND ED RECEIVERS COUPLED THROUGH A CIRCUIT TO PROVIDE THE RESPONSE SHAPE.

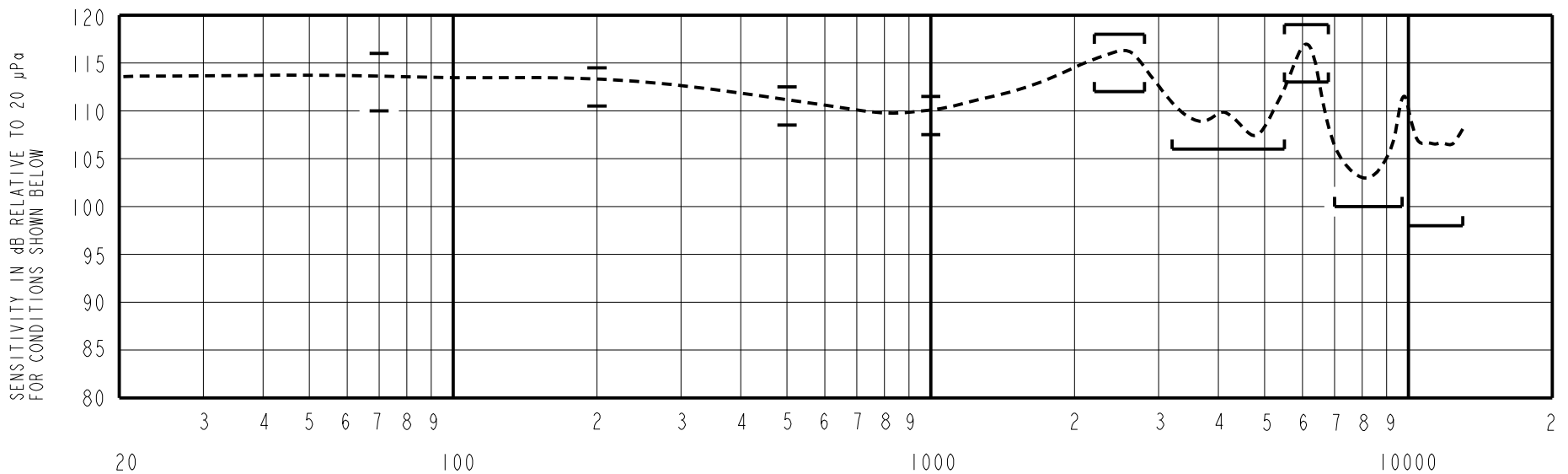
NO DAMPING

GQ-30783-000

SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS

TESTED WITH VENT UNSEALED



TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.101 V rms, 0 V DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	7 X 2 mm + 0.188cc CAVITY
COUPLER CAVITY	IEC 60318-4 ("711")
TEST STATION	FCAAT

TABLE 1

ACOUSTICAL

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

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
70	+0.5	+3.5	+6.5
200	+1.0	+3.0	+5.0
500	-1.0	+1.0	+3.0
1000	-2.0	109.5	+2.0
2200 - 2800	+2.5	+6.0	+8.5
3200 - 5500	-3.5	---	---
5500 - 6800	+3.5	+6.5	+9.5
7000 - 9700	-9.5	---	---
10000 - 13000	-11.5	---	---

TABLE 2

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

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (mA)	LIMIT (%)
500	0.202	0	8
830	0.101	0	5
1250	0.101	0	5

TABLE 3

ELECTRICAL

DC RESISTANCE	12.5 Ohms ± 10%
IMPEDANCE @ 500 Hz	21.5 Ohms ± 15%
IMPEDANCE @ 1kHz	39.4 Ohms ± 15%

TABLE 4

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

MECHANICAL

PORT LOCATION: 12S  
SOLDER TYPE: SAC305 (LEAD FREE)

TEMPERATURE:

OPERATING: SENSITIVITY AT 1K Hz WILL NOT VARY MORE THAN +1/-3 dB FROM 17°C TO 63°C.  
STORAGE: -40°C TO 63°C.

BUZZ TEST

LISTENING TEST CONDUCTED BETWEEN 20Hz TO 3kHz TO DETECT BUZZ.

INPUT DRIVE SIGNAL	0.18V
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TABLE 5

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	D
D	C10116006	6-6-14		

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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

**GQ-30783-000**  
SHT 2.1

DR. BY	DATE
MMM	7-28-09
CK. BY	DATE
GJP	7-30-09
APP. BY	DATE
GJP	7-30-09