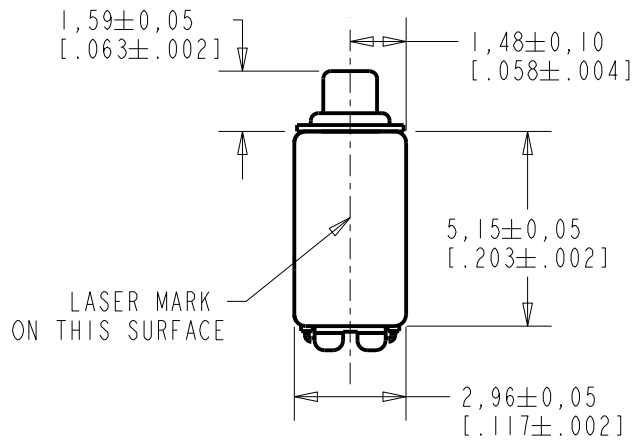
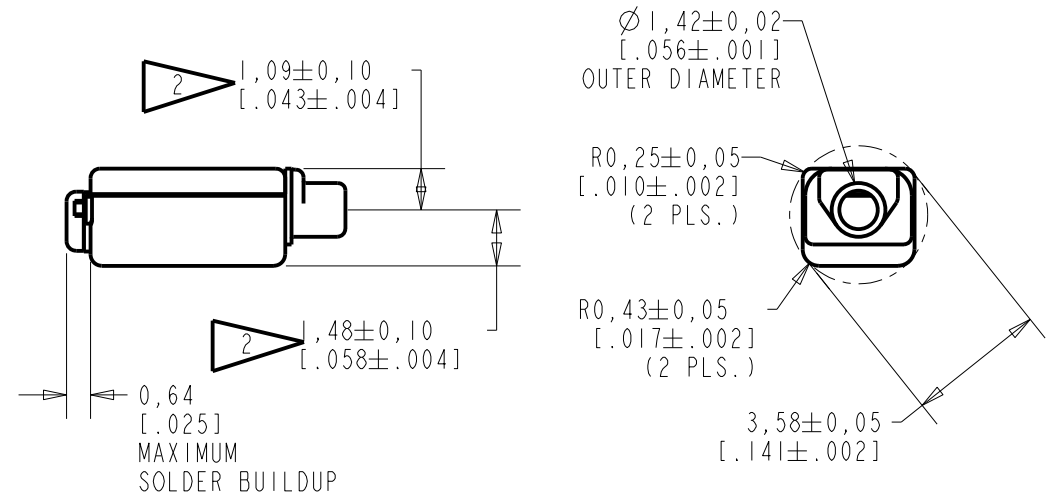
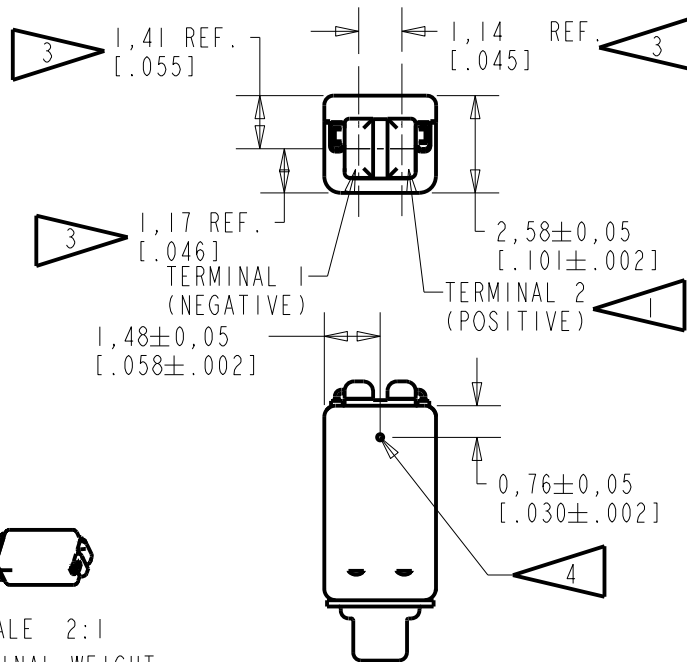


**RAB-32033-000**

**SHT 1.1**



- NOTE:
- 1 A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES AN INCREASE 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 DIMENSION TO APPROXIMATE CENTER OF TERMINAL PAD.
  - 4 IT IS IMPROTANT TO KEEP HOLE CLEAN AT ALL TIMES. CLOGGING THE HOLE WILL CAUSE PERFORMANCE CHANGES.



SCALE 2:1  
NOMINAL WEIGHT  
.17 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			<b>Active</b>	<b>A</b>
A	CI0115179P	10-31-13		

SCALE:	<b>5:1</b>	DR. BY	DATE
DO NOT SCALE DRAWING		OQ	10-31-13
TITLE:	<b>RECEIVER</b>	GJP	11-1-13
	<b>OUTLINE DRAWING</b>	APP. BY	DATE
	<b>RAB-32033-000</b>	GJP	11-1-13
	<b>SHT 1.1</b>		

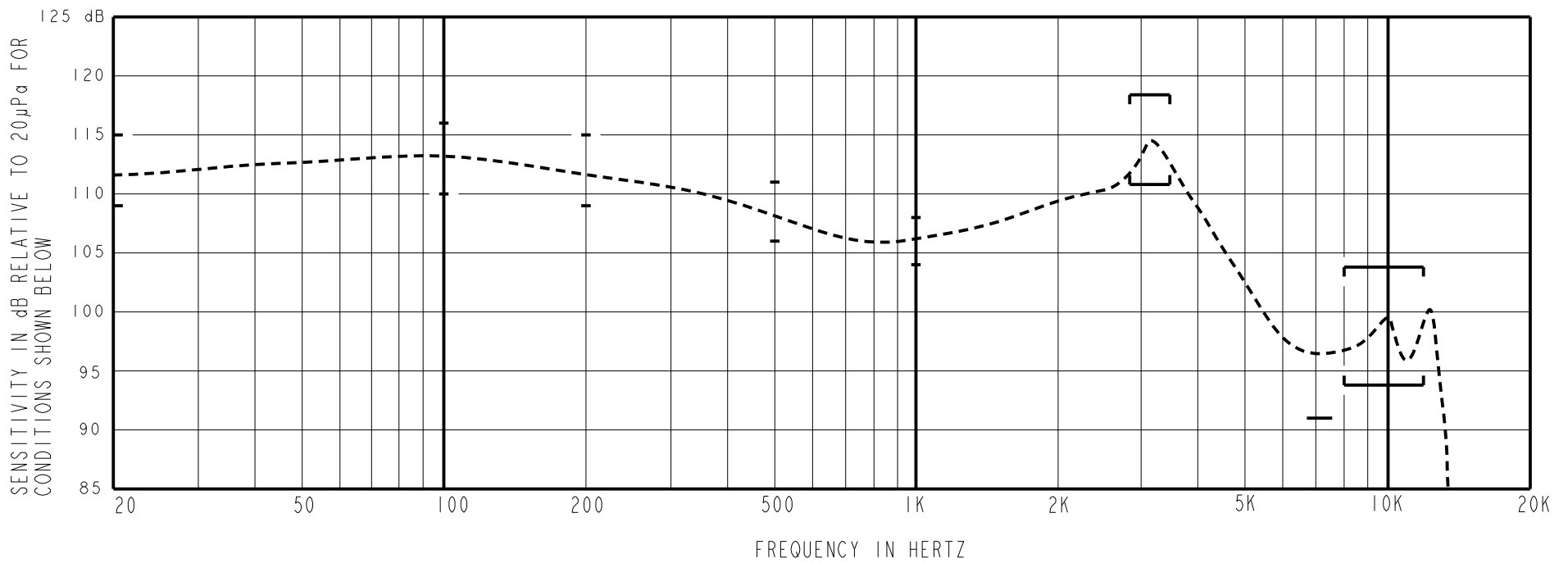
THIS IS A MAGNETIC BALANCED ARMATURE RECEIVER INTENDED FOR USE IN EARPHONE APPLICATIONS. THE RECEIVER HAS A BACK VENT.

NO DAMPING

RAB-32033-000

SHEET 2.1

CONSTANT VOLTAGE DRIVE RESPONSE



ACOUSTICAL

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

LIMIT TYPE	FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
REL	20	+3.0	+6.0	+9.0
REL	100	+4.0	+7.0	+10.0
REL	200	+3.0	+6.0	+9.0
REL	500	0	+2.5	+5.0
REF	1000	-2.0	106.0	+2.0
PEAK	2850-3450	+5.0	+8.0	+11.0
VALLEY	6700-7700	-15.0	---	---
PEAK	8000-11800	-13.0	-8.0	-3.0

TABLE 1.

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

FREQUENCY (Hz)	DRIVE (Vrms)	LIMIT (%)
50	0.115	6.0
1/3 PEAK 1 (TYP. 1050)	0.115	7.0
1/2 PEAK 1 (TYP. 1575)	0.115	5.0
1/3 PEAK 1 (TYP. 1050)	0.324	10.0
1/2 PEAK 1 (TYP. 1575)	0.324	10.0

TABLE 2.

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.115 Vrms
SOURCE IMPEDANCE	< 1 Ω
TUBING	TUBELESS, KNOWLES TOOL NUMBER T8688
COUPLER CAVITY	IEC 60318-4 (IEC 711)

TABLE 3.

ELECTRICAL

DC RESISTANCE	22.0 Ω ±10%
IMPEDANCE @ 500 Hz	33.5 Ω ±15%
IMPEDANCE @ 1 kHz	50.0 Ω ±15%
INDUCTANCE @ 500 Hz	7.2 mH TYPICAL

TABLE 4.

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

MECHANICAL

PORT LOCATION: 12C

SOLDER TYPE: ROHS COMPLIANT  
SAC305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN +1/-3 dB FROM 0°C TO 63°C  
STORAGE: -40°C TO 63°C

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	C10115179P	10-31-13	Active	A

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: <b>RECEIVER</b>		OO	10-31-13
PERFORMANCE SPECIFICATION		CK. BY	DATE
RAB-32033-000		GJP	11-1-13
SHT 2.1		APP. BY	DATE
		GJP	11-1-13