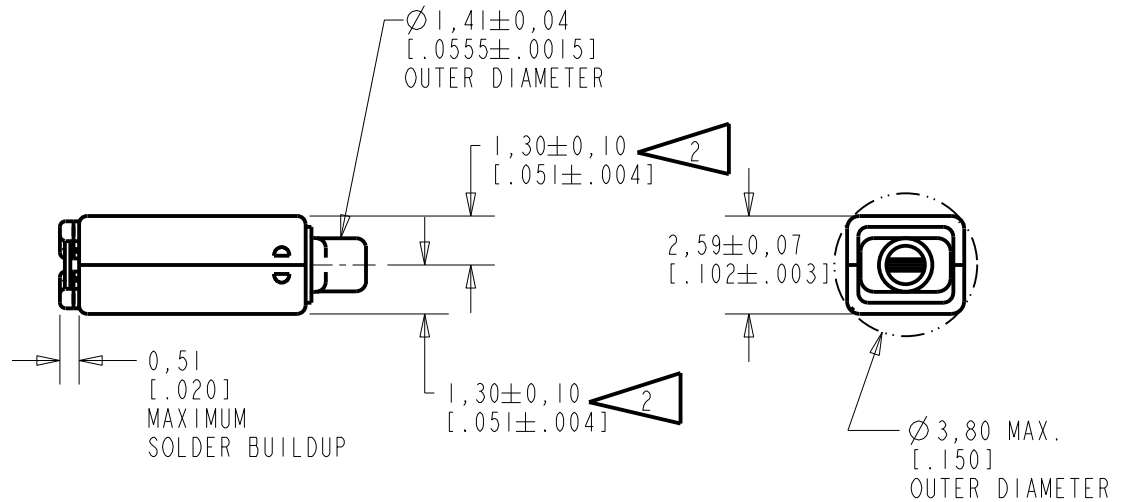
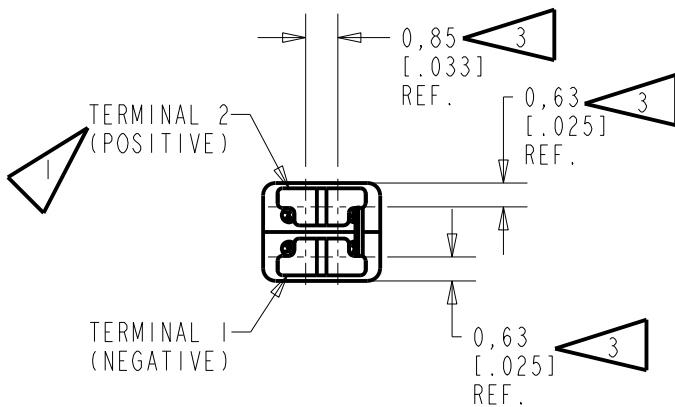
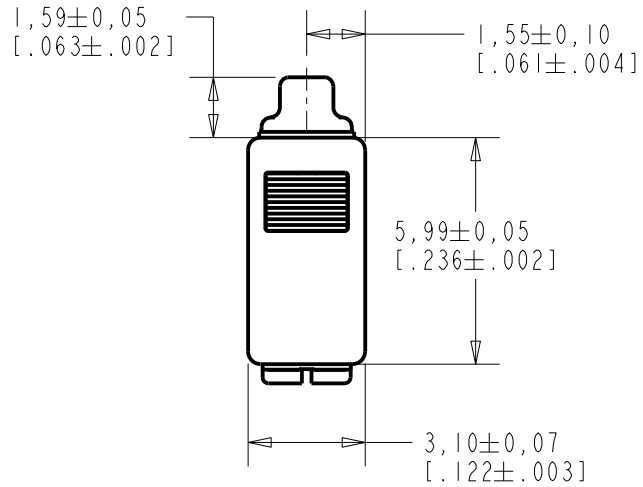


**GD-31440-000**  
SHT 1.1



NOTES:

- 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 DIMENSIONS TO APPROXIMATE CENTER OF TERMINAL PAD



SCALE 2:1  
0.16 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C10113289	3-30-12	<b>Active</b>	<b>B</b>
A	C10113000	12-16-11		
SCALE: 5:1				
DO NOT SCALE DRAWING			DR. BY	DATE
TITLE: RECEIVER OUTLINE DRAWING			KL	12-16-11
			GD-31440-000	
SHT 1.1			CK. BY	DATE
			GJP	12-16-11
			APP. BY	DATE
			GJP	12-16-11

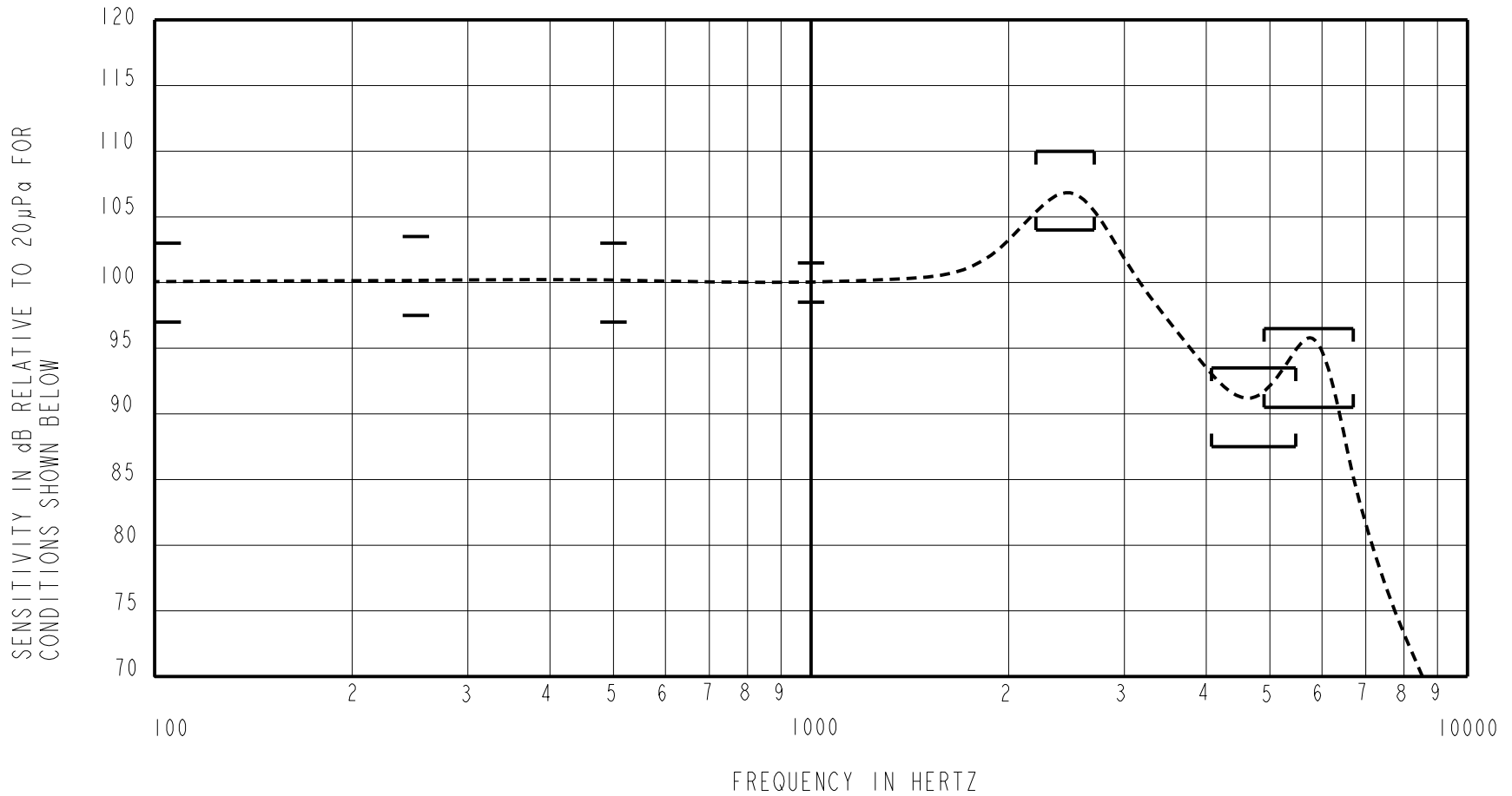
**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

INTENDED FOR USE IN CIC, RIC, AND MINI-BTE APPLICATIONS. THIS IS A PAIR OF GE RECEIVERS WITH VERY LOW VIBRATION IN ALL DIRECTIONS. ONE GE RECEIVER IS REVERSE MAGNETIZED FOR MAGNETIC LEAKAGE CONSIDERATIONS. THIS RECEIVER HAS  $\mu$ METAL CUPS.

NO DAMPING

CD-31440-000  
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  $20\mu\text{Pa}$ . ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

LIMIT TYPE	FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
REL	100	-3.0	0.0	+3.0
REL	250	-2.5	+0.5	+3.5
REL	500	-3.0	0.0	+3.0
REF	1000	-1.5	100.0	+1.5
PEAK	2200 - 2700	+4.0	+7.0	+10.0
VALLEY	4075 - 5475	-12.5	-9.5	-6.5
PEAK	4900 - 6700	-9.5	-6.5	-3.5

TABLE 1

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

FREQUENCY (Hz)	AC DRIVE (Vrms)	DC BIAS (V)	LIMIT (%)
833	0.244	0	3
1250	0.244	0	3
833	0.690	0	8
1250	0.690	0	8

TABLE 2

MAXIMUM OUTPUT LEVEL (TYPICAL)

POWER (mW)	500 Hz SPL (dB)	REQUIRED VOLTAGE (Vrms)	Peak SPL (dB)	REQUIRED VOLTAGE (Vrms)
10	113.9	1.3	124.1	2.0
50	119.6	3.0	128.5	3.9

TABLE 3

**TEST CONDITIONS**

NOMINAL SOURCE VOLTAGE	0.244 Vrms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10 mm [.394"] LONG X 1 mm [.039"] I.D. ("ITE")
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 4

**ELECTRICAL**

DC RESISTANCE @ 20°C	165 Ohms ± 10%
IMPEDANCE @ 500 Hz	184 Ohms ± 15%
IMPEDANCE @ 1 kHz	223 Ohms ± 15%
INDUCTANCE @ 500 Hz	22.2 mH TYPICAL
CAPACITANCE @ 10 MHz	6.3 pF TYPICAL

TABLE 4

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

**MECHANICAL**

PORT LOCATION: 12S

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 15,000 G.

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Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C10113289	3-30-12	Active	B
A	C10113000	12-16-11		
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		CD-31440-000	CK. BY DATE	GJP 12-16-11
PERFORMANCE SPECIFICATION		SHT 2.1	APP. BY DATE	GJP 12-16-11