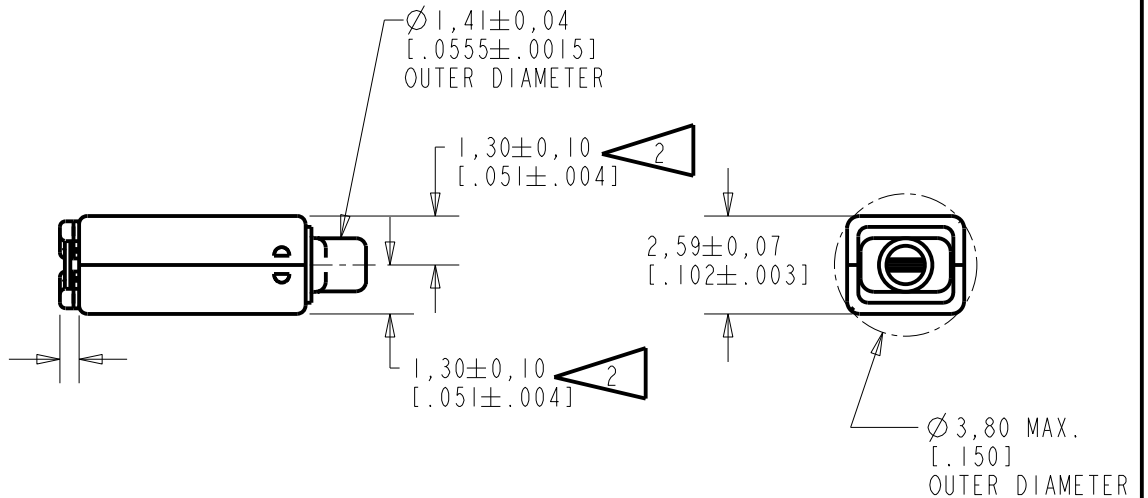
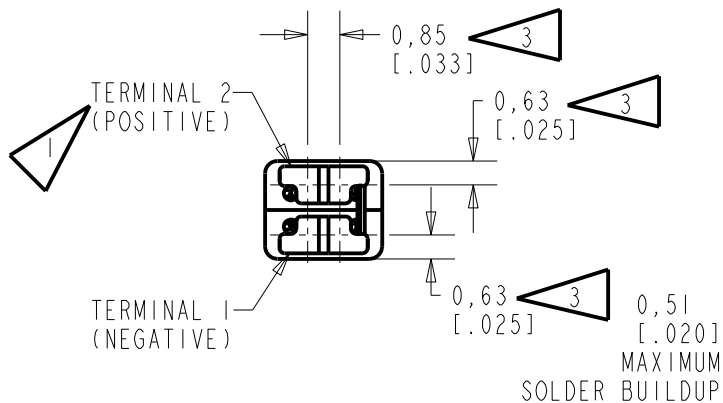
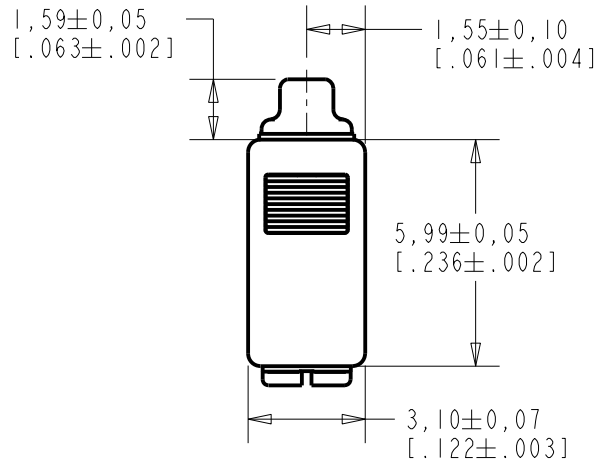


GD-31288-000

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 DIMENSION TO APPROXIMATE CENTER OF TERMINAL PAD.



SCALE 2:1
0.16 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| C | C10113289 | 3-30-12 | Active | C |
| B | C10112587 | 6-28-11 | | |
| A | C10111748 | 10-18-10 | | |

| | | | |
|----------------------|--|--------------|----------------|
| SCALE: 5:1 | | DR. BY: LSY | DATE: 10-18-10 |
| DO NOT SCALE DRAWING | | | |
| TITLE: RECEIVER | | GD-31288-000 | |
| OUTLINE DRAWING | | SHT 1.1 | |
| | | APP. BY: GJP | DATE: 11-1-10 |
| | | GJP | 11-1-10 |

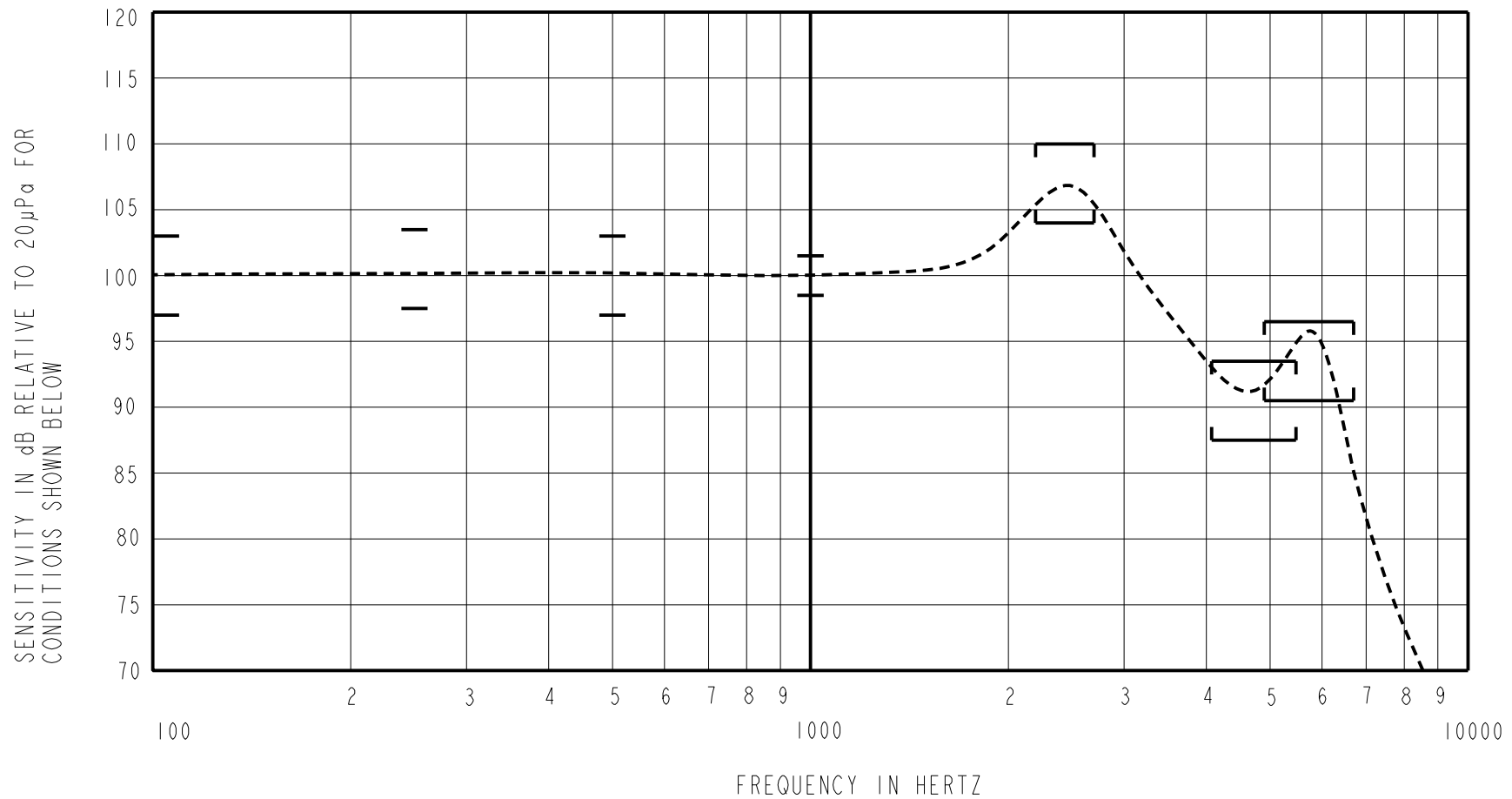
KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

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.

NO DAMPING

CD-31288-000
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 20µPa. 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 | 0.289 | 0 | 3 |
| 1250 | 0.289 | 0 | 3 |
| 833 | 0.813 | 0 | 8 |
| 1250 | 0.813 | 0 | 8 |

TABLE 2

MAXIMUM OUTPUT LEVEL (TYPICAL)

| POWER (mW) | 500 Hz SPL (dB) | REQUIRED VOLTAGE (Vrms) | Peak SPL (dB) | REQUIRED VOLTAGE (Vrms) |
|------------|-----------------|-------------------------|---------------|-------------------------|
| 10 | 114.1 | 1.5 | 123.8 | 2.2 |
| 50 | 117.4 | 3.3 | 127.9 | 4.5 |

TABLE 3

TEST CONDITIONS

| | |
|------------------------|---|
| NOMINAL SOURCE VOLTAGE | 0.289 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 ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5) |

TABLE 4

ELECTRICAL

| | |
|----------------------|-----------------|
| DC RESISTANCE @ 20°C | 201 Ohms ± 10% |
| IMPEDANCE @ 500 Hz | 230 Ohms ± 15% |
| IMPEDANCE @ 1 kHz | 281 Ohms ± 15% |
| INDUCTANCE @ 500 Hz | 22.2 mH TYPICAL |
| CAPACITANCE @ 10 MHz | 6.27 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 ±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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| C | C10113289 | 3-30-12 | Active | C |
| B | C10112587 | 6-28-11 | | |
| A | C10111748 | 10-18-10 | | |
| 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 PERFORMANCE SPECIFICATION | | | LSY | 10-18-10 |
| | | | CD-31288-000 SHT 2.1 | |
| | | | CK. BY | DATE |
| | | | GJP | 11-1-10 |
| | | | APP. BY | DATE |
| | | | GJP | 11-1-10 |