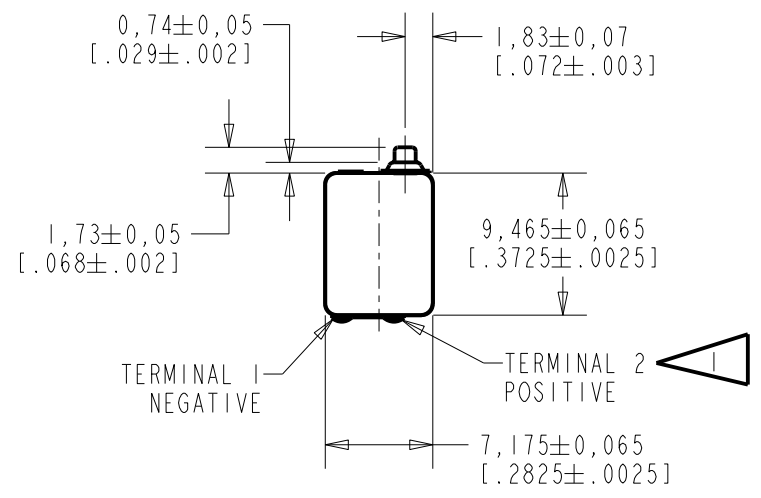
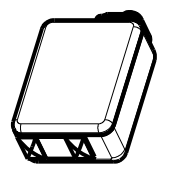
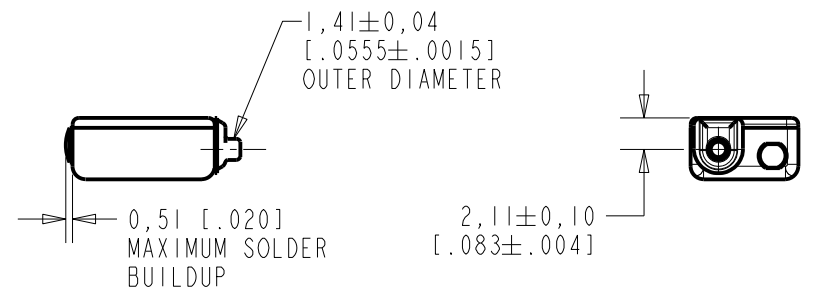
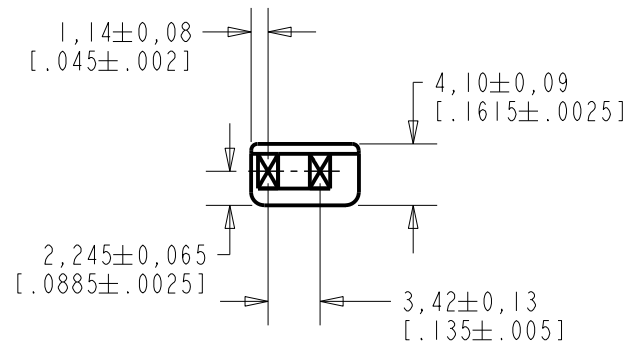


**CI-30050-000**  
SHT 1.1



NOTES:

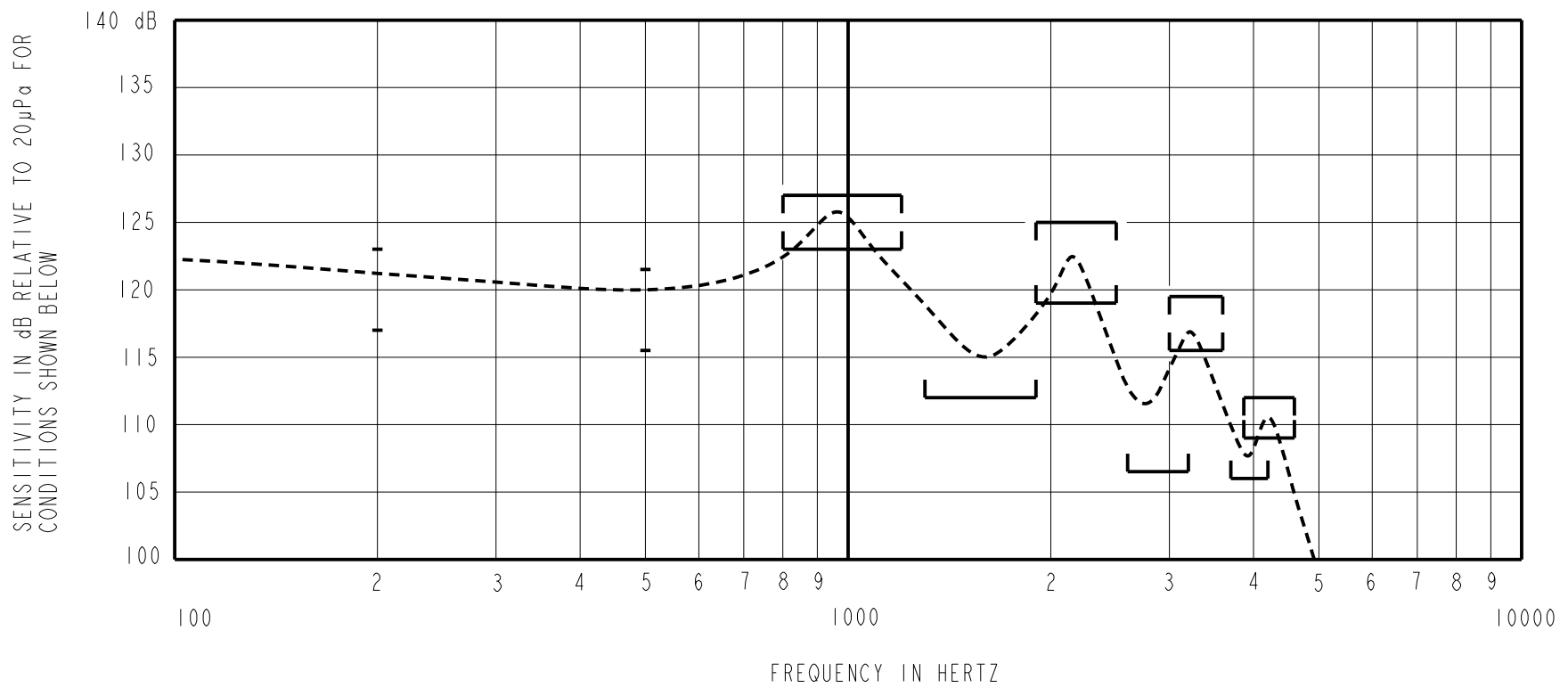
▶ A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.



DIMENSIONS IN MILLIMETERS [INCHES]

| Revision             | C.O. #    | Implementation Date | RELEASE LEVEL | REVISION |
|----------------------|-----------|---------------------|---------------|----------|
| B                    | CI0111948 | 12-31-10            | Active        | B        |
| A                    | CI0104716 | 9-13-06             |               |          |
| SCALE: 2:1           |           |                     | DR. BY        | DATE     |
| DO NOT SCALE DRAWING |           |                     | SDZ           | 9-13-06  |
| TITLE: RECEIVER      |           |                     | CK. BY        | DATE     |
| OUTLINE DRAWING      |           |                     | GJP           | 9-29-06  |
| CI-30050-000         |           |                     | APP. BY       | DATE     |
| SHT 1.1              |           |                     | GJP           | 9-29-06  |

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**ACOUSTICAL**

SENSITIVITY\*  
DEVICE WILL PRODUCE THE SPL LISTED BELOW WITH THE TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT 500 Hz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 500 Hz.

| FREQUENCY (Hz)     | MINIMUM | NOMINAL | MAXIMUM |
|--------------------|---------|---------|---------|
| 200                | -1.5    | +1.5    | +4.5    |
| 500                | -3.0    | +118.5  | +3.0    |
| 800-1200 PEAK 1    | +4.5    | +6.5    | +8.5    |
| 1300-1900 VALLEY 1 | -6.5    | ---     | ---     |
| 1900-2500 PEAK 2   | +0.5    | +3.5    | +6.5    |
| 2600-3200 VALLEY 2 | -12.0   | ---     | ---     |
| 3000-3600 PEAK 3   | -3.0    | -1.0    | +1.0    |
| 3700-4200 VALLEY 2 | -12.5   | ---     | ---     |
| 4100-4600 PEAK 4   | -9.5    | -8.0    | -6.5    |

TABLE 1.

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

| FREQUENCY (Hz) | DRIVE (V RMS) | DC BIAS (MA) | LIMIT (%) |
|----------------|---------------|--------------|-----------|
| 350            | .148 V        | 0            | 5         |
| 500            | .148 V        | 0            | 5         |
| 500            | .412 V        | 0            | 10        |

TABLE 2.

TEST CONDITIONS

|                        |   |
|------------------------|---|
| NOMINAL SOURCE VOLTAGE | .148 Vrms, 0 Vdc BIAS   |
| SOURCE IMPEDANCE       | < 1 Ω   |
| TUBING                 | 8 mm (.315) LONG X 1 mm (.039) ID<br>28 mm (1.10) LONG X 1.5 mm (.059) ID<br>25 mm (.984) LONG X 2 mm (.079) ID<br>18 mm (.710) LONG X 3 mm (.118) ID |
| COUPLER CAVITY         | 2 CC SIMULATED ANSI S3.6 TYPE HA-3 (IEC 60318-5)  |

TABLE 3.

POLARITY  
POSITIVE SIGNAL APPLIED TO TERMINAL 2 WILL PRODUCE A INCREASE IN SOUND PRESSURE AT THE SOUND OUTLET (REVERSE POLARITY).

**ELECTRICAL**

|                   |           |
|-------------------|-----------|
| DC RESISTANCE     | 9.2Ω ±10% |
| IMPEDANCE @ 500Hz | 25Ω ±20%  |

TABLE 4.

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

**MECHANICAL**

PORT LOCATION: IS

SOLDER TYPE: SAC305 (LEAD FREE)

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN +1/-3 dB FROM -17°C TO 63°C

STORAGE: -40°C TO 63°C

MECHANICAL SHOCK

LEAK TEST AFTER AGING (NO LEAK AFTER ANY OF THE ABOVE TESTS)

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| Revision   | C.O. #    | Implementation Date       | RELEASE LEVEL       | REVISION     |
|--|-----------|---------------------------|---------------------|--------------|
| B  | CI0111948 | 12-31-10                  | <b>Active</b>       | <b>B</b>     |
| A  | CI0104716 | 9-13-06                   |                     |              |
| 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:   |           | <b>RECEIVER</b>           | <b>CI-30050-000</b> | DR. BY DATE  |
|  |           | PERFORMANCE SPECIFICATION | <b>SHT 2.1</b>      | BCR 12-29-95 |
|  |           |                           |                     | CK. BY DATE  |
|  |           |                           |                     | SJM 1-4-96   |
|  |           |                           |                     | APP. BY DATE |
|  |           |                           |                     | DRK 1-9-96   |