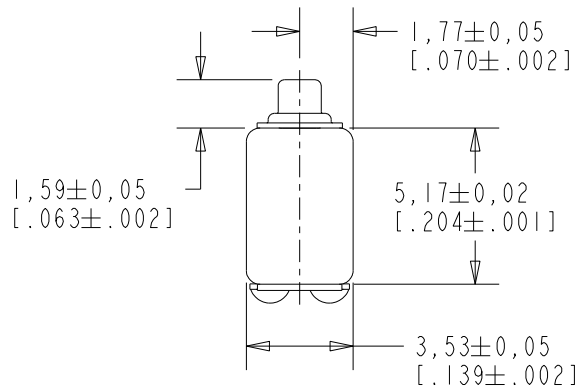


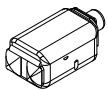
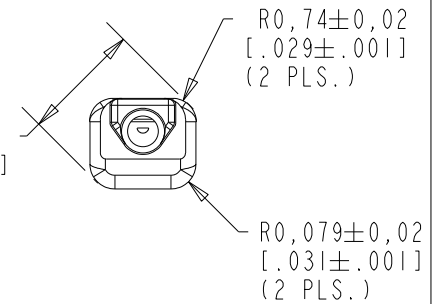
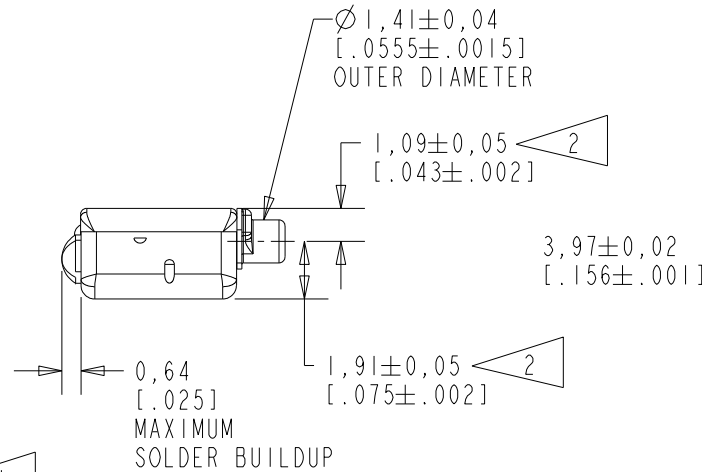
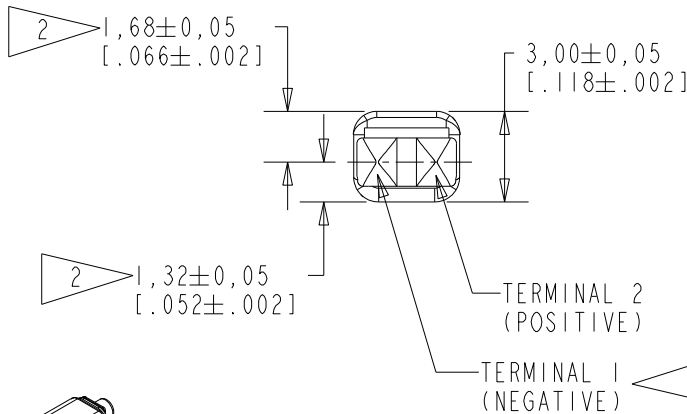
FC-30814-166

SHT 1.1



NOTES:

- 1 A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, 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.



SCALE 2:1

NOMINAL WEIGHT
.23 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| B | PI0001125 | 1-13-17 | Active | B |
| A | CI0113020 | 11-24-11 | | |

| | | | |
|----------------------|--|--------------|----------|
| SCALE: 4:1 | | DR. BY | DATE |
| DO NOT SCALE DRAWING | | LSY | 11-24-11 |
| TITLE: RECEIVER | | FC-30814-166 | CK. BY |
| OUTLINE DRAWING | | SHT 1.1 | GJP |
| | | APP. BY | DATE |
| | | GJP | 11-30-11 |

KNOWLES CORPORATION

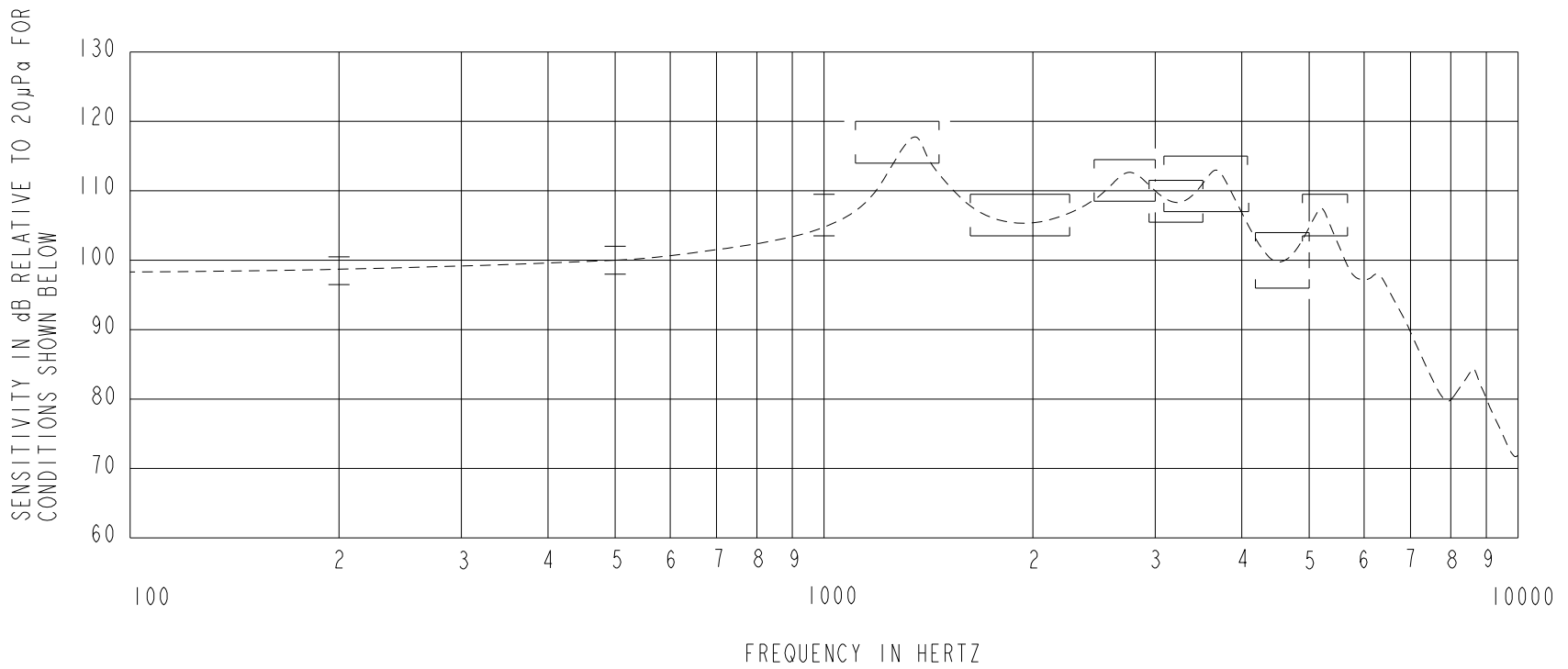
THE FC-30814-166 IS AN UNDAMPED MAGNETIC BALANCED ARMATURE RECEIVER INTENDED FOR USE IN ITC AND CIC HEARING INSTRUMENTS WITH HIGH DCR/IMPEDANCE RATIO AND INCREASED BANDWIDTH MOTOR.

NO DAMPING

FC-30814-166

SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

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

| FREQUENCY (Hz) | MINIMUM | NOMINAL | MAXIMUM |
|--------------------|---------|---------|---------|
| 200 | -3.5 | -1.5 | +0.5 |
| 500 | -2.0 | 100.0 | +2.0 |
| 1000 | +3.5 | +6.5 | +9.5 |
| 1150-1550 PEAK 1 | +14.0 | +17.0 | +20 |
| 1700-2300 VALLEY 1 | +3.5 | +6.5 | +9.5 |
| 2500-3000 PEAK 2 | +8.5 | +11.5 | +14.5 |
| 2950-3550 VALLEY 2 | +5.5 | +8.5 | +11.5 |
| 3100-4100 PEAK 3 | +7.0 | +11.0 | +15.0 |
| 4200-5000 VALLEY 3 | -4.0 | +0.0 | +4.0 |
| 4900-5700 PEAK 4 | +3.5 | +6.5 | +9.5 |

PORT LOCATION: 12C
 SOLDER TYPE: SAC305
 TEMPERATURE
 OPERATURE: SENSITIVITY WILL NOT VARY
 MORE THAN +/-3 dB FROM
 -17°C TO 63°C.
 STORAGE: -40°C TO 63°C.

TABEL 1
 TOTAL HARMONIC DISTORTION
 DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

| FREQUENCY (Hz) | AC DRIVE (V rms) | DC BIAS (V) | LIMIT (%) |
|----------------|------------------|-------------|-----------|
| 450 | 0.136 | 0 | 5 |
| 675 | 0.136 | 0 | 8 |
| 800 | 0.207 | 0 | 5 |
| 450 | 0.272 | 0 | 8 |
| 675 | 0.272 | 0 | 15 |

TABEL 2
TEST CONDITIONS

| | |
|------------------------|--|
| NOMINAL SOURCE VOLTAGE | 0.136 V rms, 0 mA DC BIAS |
| SOURCE IMPEDANCE | <1 Ohm |
| TUBING | 8mm X 1mm ID +28mm X 1.5mm ID EAR HOOK SIMULATOR +25mm X 2mm ID TUBE +18mm X 3mm ID TUBE |
| COUPLER CAVITY | 2 CM ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC-60318-5) |

TABEL 3
ELECTRICAL

| | |
|--------------------|-----------------|
| DC RESISTANCE | 51.8 Ohms ± 10% |
| IMPEDANCE @ 500 Hz | 60.0 Ohms ± 15% |
| IMPEDANCE @ 1kHz | 74.1 Ohms ± 15% |

TABEL 4
 ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM THE COIL CIRCUIT.

| Revision | C.O. # | Implementation Date | RELEASE LEVEL | REVISION |
|----------|-----------|---------------------|---------------|----------|
| B | PI0001125 | 1-13-17 | Active | B |
| A | CI0113020 | 11-24-11 | | |

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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

FC-30814-166
 SHT 2.1

| | |
|---------|----------|
| DR. BY | DATE |
| LSY | 11-24-11 |
| CK. BY | DATE |
| GJP | 11-30-11 |
| APP. BY | DATE |
| GJP | 11-30-11 |