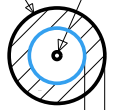


FED-26849-106

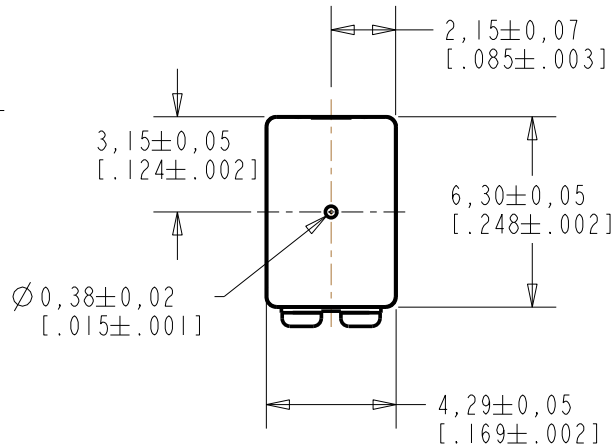
SHT 1.1

$\varnothing 0,38 \pm 0,02$   
[.015 ± .001]  
HOLE IN CUP

BAROMETRIC  
VENT HOLE



0,08  
[.003]  
BAROMETRIC RELIEF  
VENT DETAIL



NOTE:

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. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO  $\pm 0,17$  [0.007].

$\varnothing 0,38 \pm 0,02$   
[.015 ± .001]

1,94 ± 0,10  
[.077 ± .004]

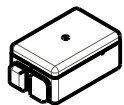
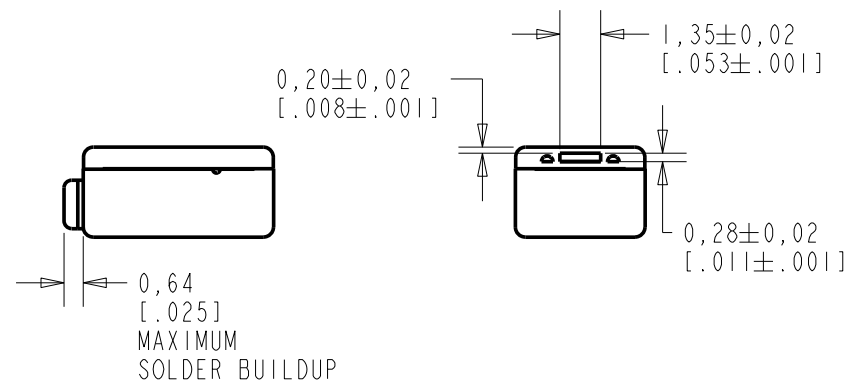
2 1,89 ± 0,17  
[.074 ± .007]

2,97 ± 0,05  
[.117 ± .002]

2 1,08 ± 0,17  
[.043 ± .007]

TERMINAL 2  
(POSITIVE)

TERMINAL 1  
(NEGATIVE)



SCALE 2:1

NOMINAL WEIGHT  
.31 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10107990	11-13-08	Active	E
D	C10104075	3-30-06		

SCALE:

4:1

DR. BY DATE

MMM 9-13-05

CK. BY DATE

GJP 9-13-05

APP. BY DATE

GJP 9-13-05

TITLE:

RECEIVER

FED-26849-106

OUTLINE DRAWING

SHT 1.1

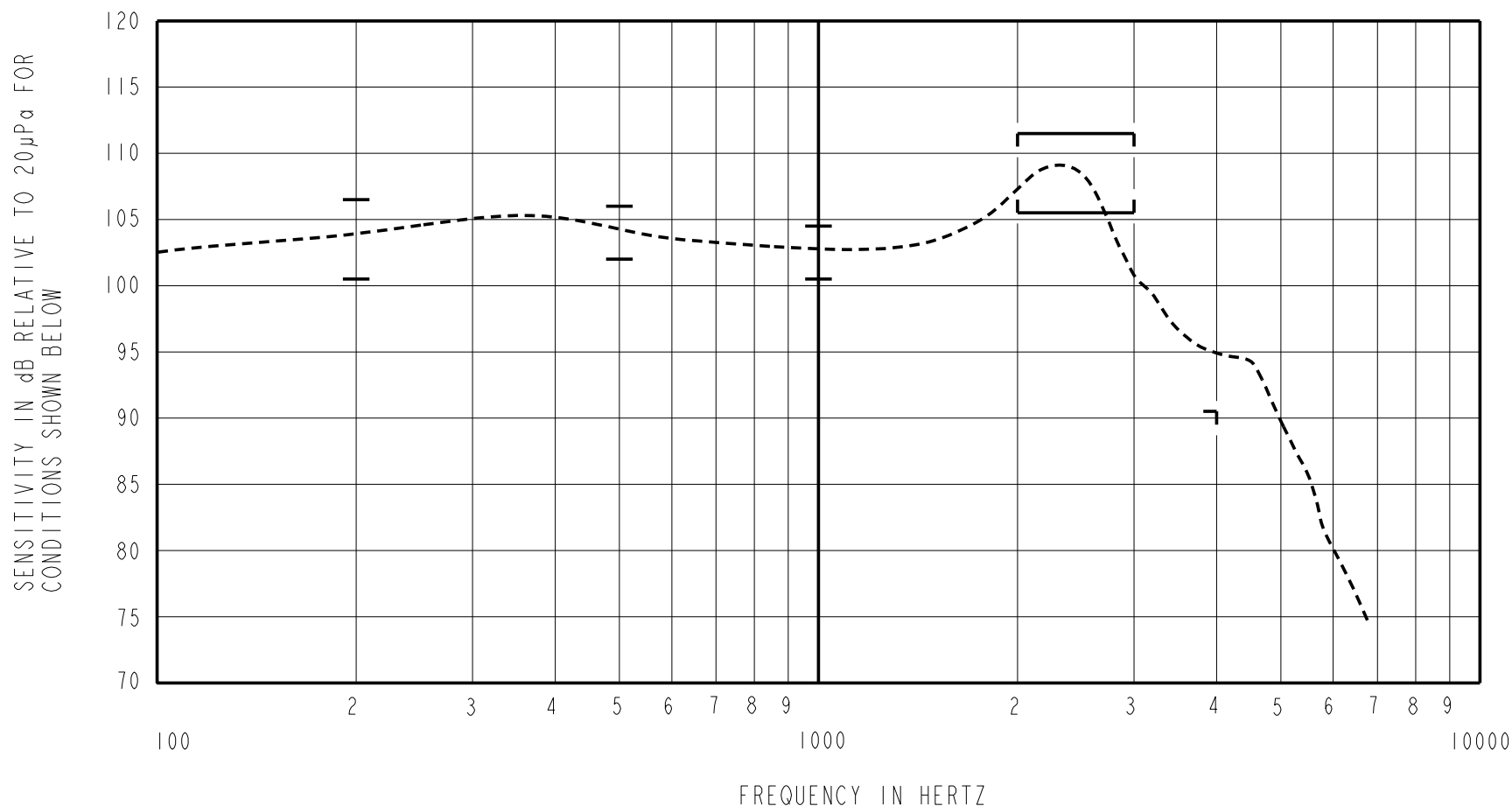
**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

THE FED-26849-106 IS A FERROFLUID AND TYPE III DAMPED RECEIVER WITH EXTERNAL VENT AND A PEAK OF 6dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS. THIS MODEL HAS INCREASED DCR/IMPEDANCE RATIO.

FERROFLUID AND  
TYPE III DAMPING

FED-26849-106  
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 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES  
IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	-2.0	+1.0	+4.0
500	-0.5	+1.5	+3.5
1000	-2.0	102.5	+2.0
2000 - 3000	+3.0	+6.0	+9.0
4000	-12.0	---	---

PORT LOCATION: 12N

TABLE 1

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

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (mA)	LIMIT (%)
500	0.470	0	10
830	0.167	0	5
1250	0.167	0	5

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.167 V rms, 0mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 126)

TABLE 3

ELECTRICAL

DC RESISTANCE	48 OHMS ± 10%
IMPEDANCE @ 500 Hz	65 OHMS ± 15%
IMPEDANCE @ 1 kHz	100 OHMS ± 15%

TABLE 4

ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM THE COIL CIRCUIT.  
BAROMETRIC RELIEF: THE AIR FLOW THROUGH THE BAROMETRIC RELIEF VENT TO BE 1.0 TO 2.5 cc/MIN WHEN AIR PRESSURE OF 15 INCHES WATER (3736 Pa) IS APPLIED AT THE PORT APERTURE.

TEMPERATURE: OPERATING RANGE FROM 0°C TO 63°C (SENSITIVITY WILL NOT VARY BY MORE THAN ±3 dB WITHIN RANGE)  
SENSITIVITY AT 0°C IS 2dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE.  
DELTA PEAK IS 1dB HIGHER AT BODY TEMPERATURE (37°C)  
STORAGE RANGE FROM -40°C TO 63°C.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10107990	11-13-08	Active	E
D	C10104075	3-30-06		

KNOWLES ELECTRONICS  
ITASCA, ILLINOIS U.S.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

TITLE: RECEIVER  
PERFORMANCE SPECIFICATION

FED-26849-106  
SHT 2.1

DR. BY	DATE
MMM	9-13-05
CK. BY	DATE
GJP	9-13-05
APP. BY	DATE
GJP	9-13-05