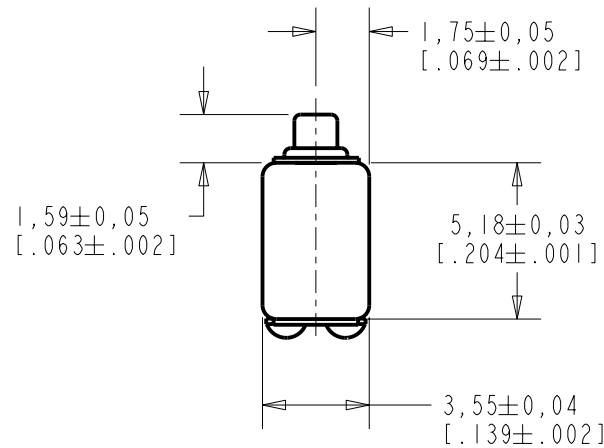


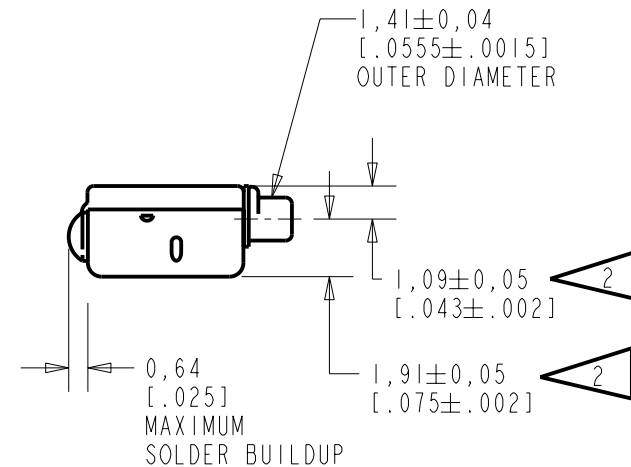
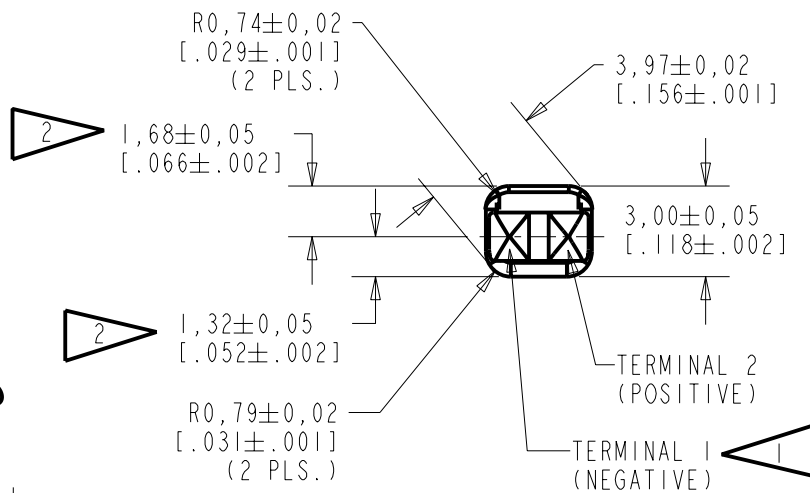
FFC-26171-102

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]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	CI0104205	5-11-06	Released	B
A	CI0103603	1-17-06		

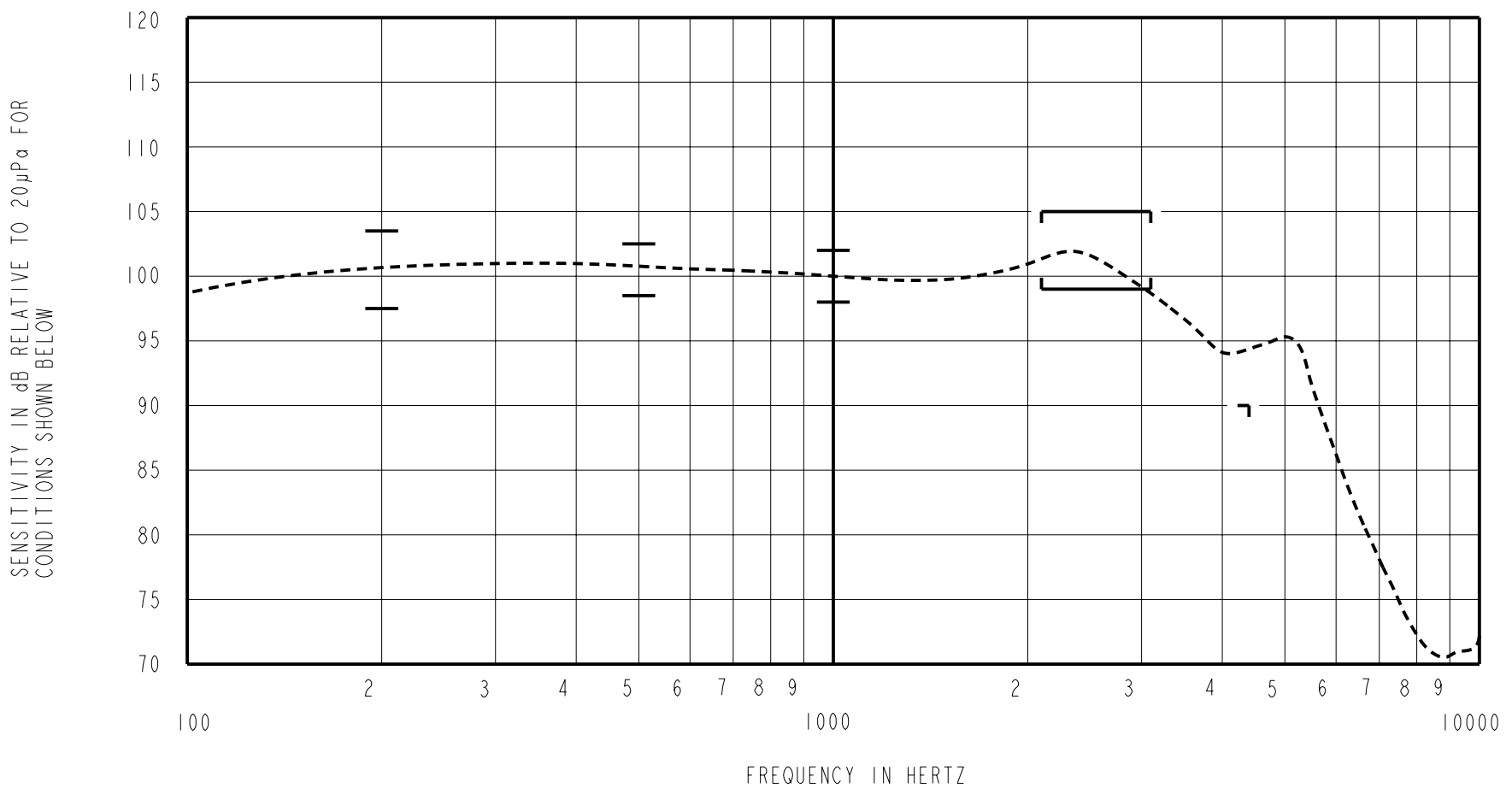
SCALE: 4:1		DR. BY	DATE
DO NOT SCALE DRAWING		AB	1-17-06
TITLE: RECEIVER		CK. BY	DATE
OUTLINE DRAWING		GJP	1-19-06
FFC-26171-102		APP. BY	DATE
SHT 1.1		GJP	1-19-06

THE FFC-26171-102 IS A FERROFLUID AND TYPE III DAMPED FC-6171-000 RECEIVER WITH A PEAK OF 2dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

FERROFLUID & TYPE III  
DAMPING

FFC-26171-102  
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	-2.5	+0.5	+3.5
500	-1.5	+0.5	+2.5
1000	-2.0	100.0	+2.0
2100 - 3100	-1.0	+2.0	+5.0
4400	-10.0	---	---

TABLE 1

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

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (V)	LIMIT (%)
500	0.48	0	10
870	0.24	0	6
1300	0.24	0	6

TABLE 2

### TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.24 V rms, 0 mA 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	135 Ohms ± 10%
IMPEDANCE @ 500 Hz	170 Ohms ± 15%
IMPEDANCE @ 1kHz	230 Ohms ± 15%

TABLE 4

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

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 1.5dB HIGHER AT BODY TEMPERATURE (37°C)  
STORAGE RANGE FROM -40°C TO 63°C

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C10104205	5-11-06	Released	B
A	C10103603	1-17-06		

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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** FFC-26171-102  
PERFORMANCE SPECIFICATION SHT 2.1

DR. BY	DATE
AB	1-17-06
CK. BY	DATE
GJP	1-19-06
APP. BY	DATE
GJP	1-19-06