

**FFC-26863-105**  
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.

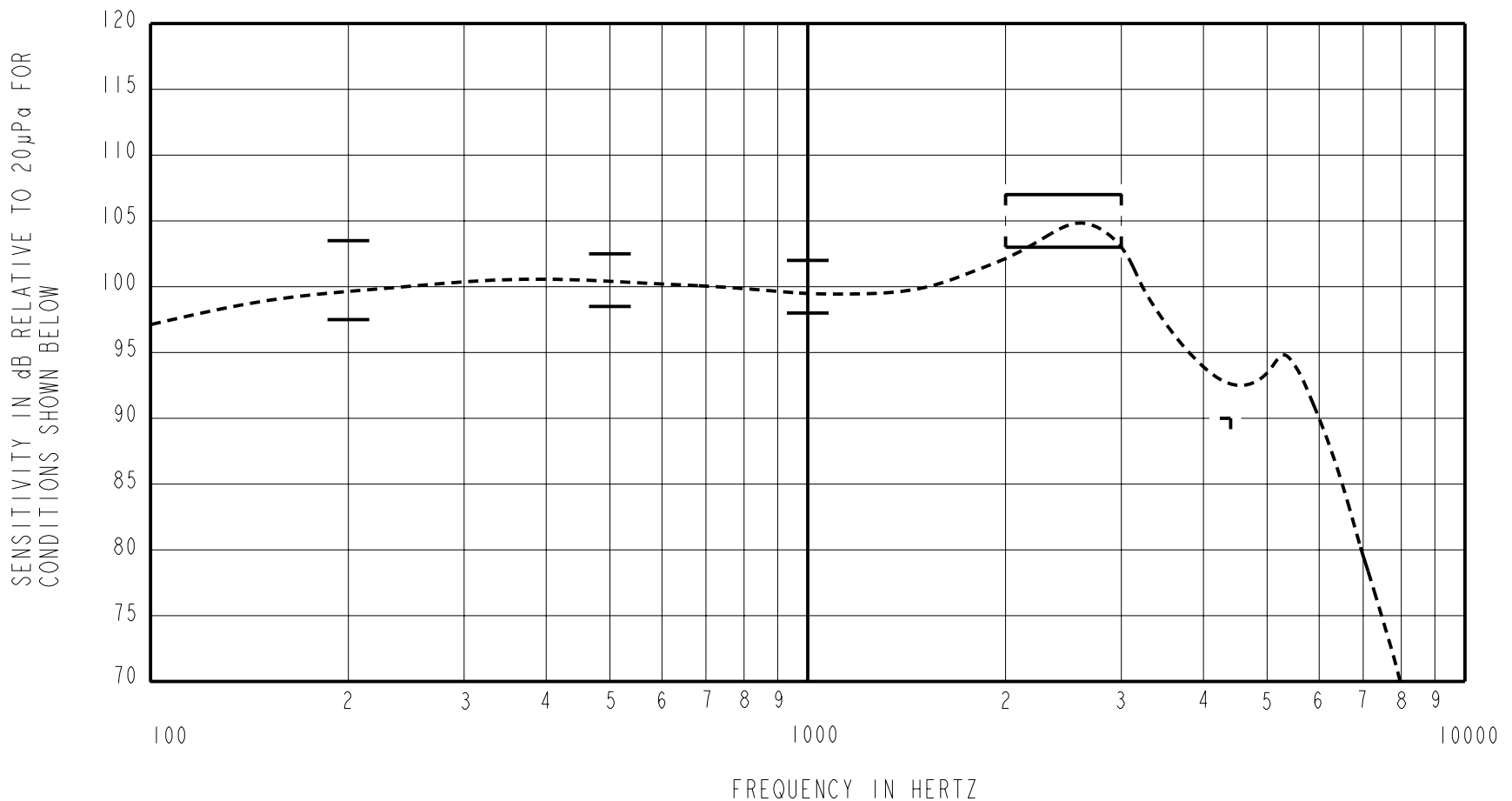
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			<b>Released</b>	<b>D</b>
D	CI0105532	3-30-07		
SCALE: <b>4:1</b>				
TITLE: <b>RECEIVER</b>			DR. BY: AB DATE: 1-12-06	
OUTLINE DRAWING			GJP 1-16-06	
FFC-26863-105			APP. BY: GJP DATE: 1-16-06	
SHT 1.1			GJP 1-16-06	

THE FFC-26863-105 IS A FERROFLUID DAMPED AND EXTERNALLY VENTED FC-26170-000 RECEIVER WITH A PEAK OF 5dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

FERROFLUID AND  
TYPE III DAMPING

FFC-26863-105  
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	+3.0	+5.0	+7.0
4400	-10.0	---	---

PORT LOCATION: 12C

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	0.98	0	10
870	0.49	0	5
1300	0.49	0	5

TABLE 2

**TEST CONDITIONS**

NOMINAL SOURCE VOLTAGE	0.49 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	540 Ohms ± 10%
IMPEDANCE @ 500 Hz	640 Ohms ± 15%
IMPEDANCE @ 1kHz	845 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 TO 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.  
STORAGE RANGE FROM -40°C TO 63°C

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	D
D	C10105532	3-30-07		

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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-26863-105**  
PERFORMANCE SPECIFICATION **SHT 2.1**

DR. BY	DATE
AB	1-12-06
CK. BY	DATE
GJP	1-16-06
APP. BY	DATE
GJP	1-16-06