

## Excellent Integrated System Limited

Stocking Distributor

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[FFH-23605-I02](#)

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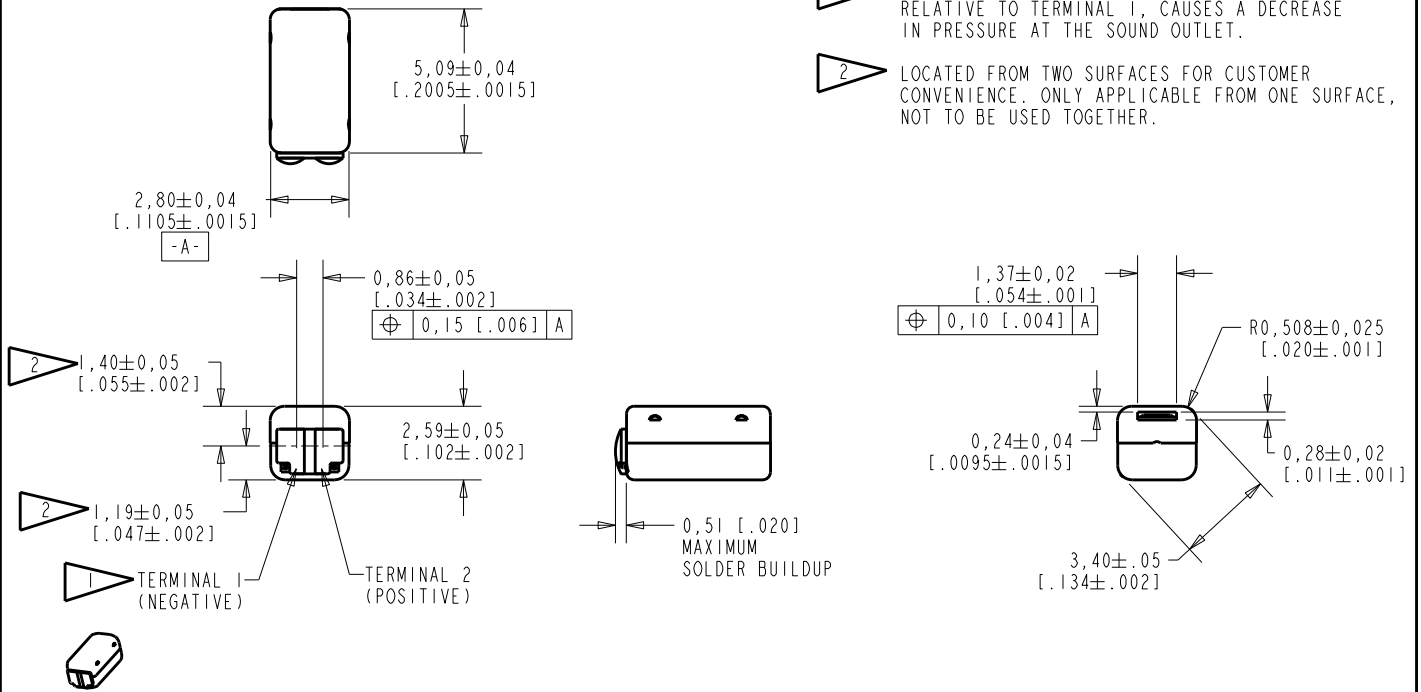
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

**FFH-23605-102**

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  
.18 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10109708P	10-28-10	<b>Active</b>	<b>C</b>
B	C10103998	3-7-06		
A	C10103482	12-7-05		

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

SCALE:	<b>5:1</b>		DR. BY	DATE
DO NOT SCALE DRAWING			CRG	12-7-05
TITLE:	<b>RECEIVER</b>	<b>FFH-23605-102</b>	CK. BY	DATE
	OUTLINE DRAWING	<b>SHT 1.1</b>	GJP	12-8-05
			APP. BY	DATE
			GJP	12-8-05

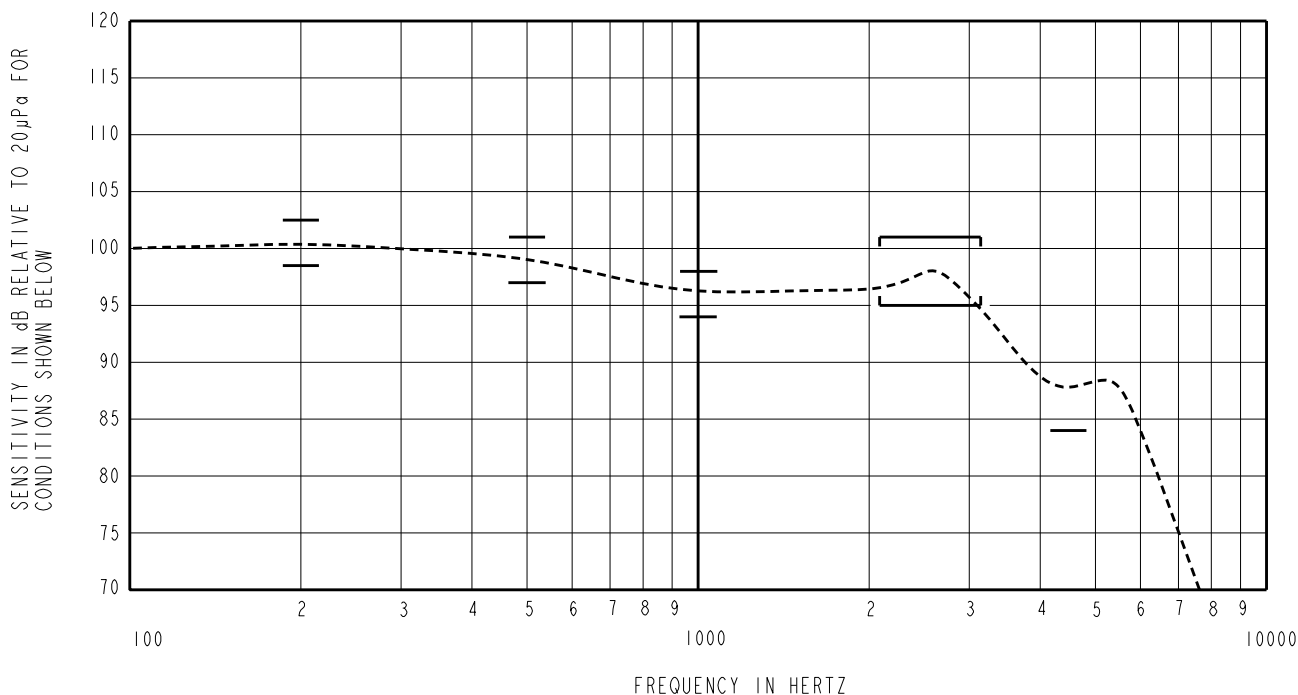
FERROFLUID DAMPING

FFH-23605-102

SHEET 2.1

THE FFH-23605-102 IS A FERROFLUID DAMPED FH-23605 RECEIVER WITH A PEAK OF 2dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

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	4.5	6.5
500	1.0	3.0	5.0
1000	-2.0	96.0	2.0
2100 - 3100	-1.0	2.0	5.0
4500	-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 (V)	LIMIT (%)
500	0.70	0	10
870	0.25	0	6
1300	0.25	0	6

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.25 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	240 Ohms ± 10%
IMPEDANCE @ 500 Hz	353 Ohms ± 15%
IMPEDANCE @ 1kHz	553 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