



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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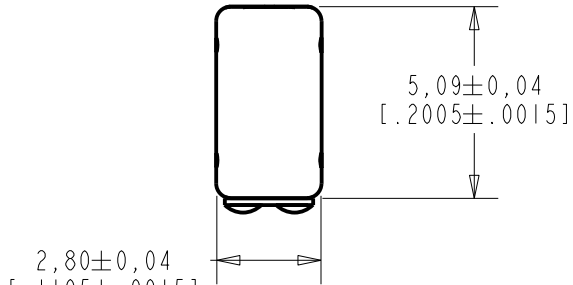


# FFH-23605-102

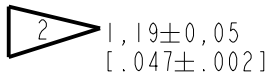
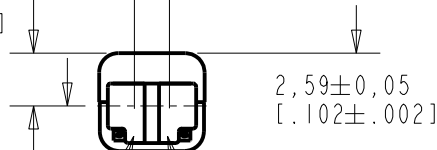
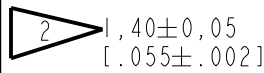
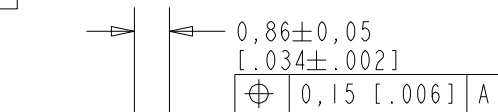
SHT 1.1

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.



-A-



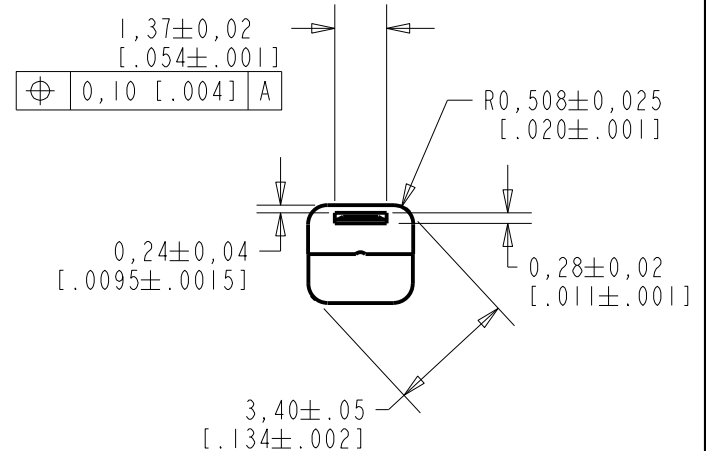
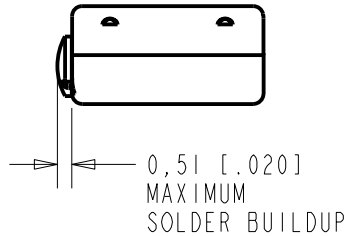
1 TERMINAL 1 (NEGATIVE)  
2 TERMINAL 2 (POSITIVE)



SCALE 2:1

NOMINAL WEIGHT  
.18 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]



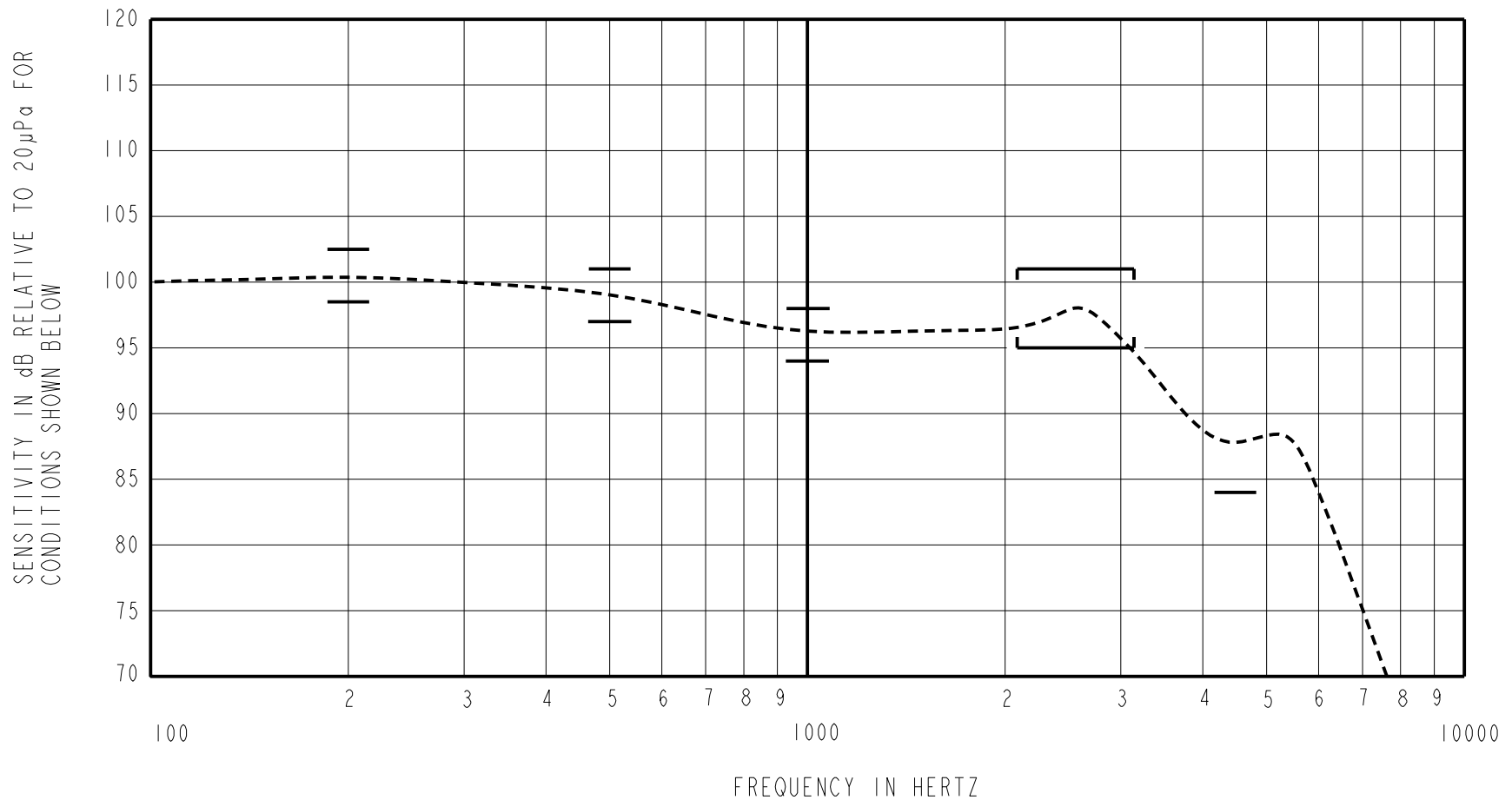
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	CI0109708P	10-28-10	Active	C
B	CI0103998	3-7-06		
A	CI0103482	12-7-05		

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

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

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

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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	DR. BY CRG	DATE 12-7-05
TITLE: RECEIVER	G.J.P.	12-8-05
PERFORMANCE SPECIFICATION	APP. BY G.J.P.	DATE 12-8-05

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ITASCA, ILLINOIS U.S.A.

RECEIVER  
PERFORMANCE SPECIFICATION

FFH-23605-102  
SHT 2.1