



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!



## Contact us

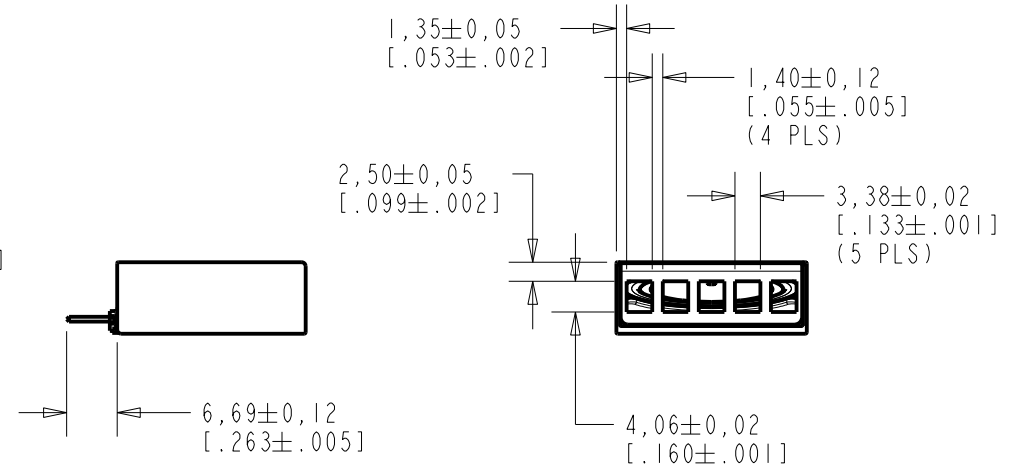
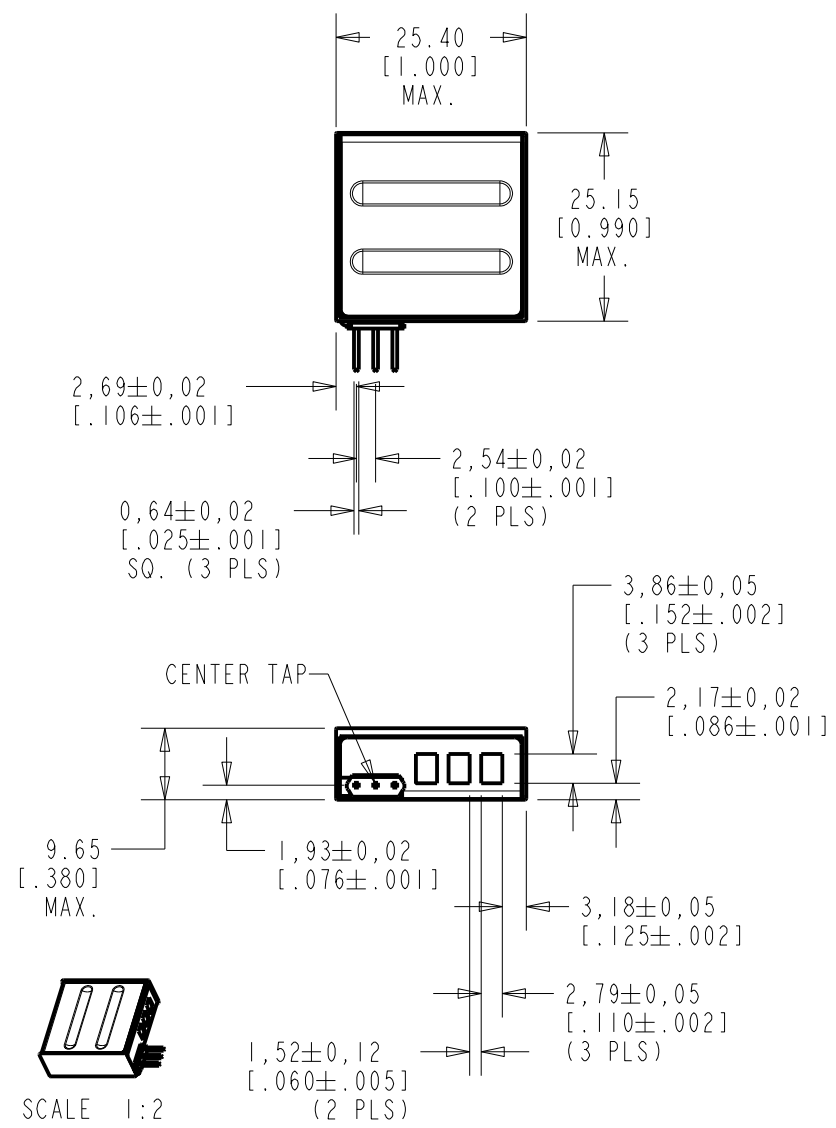
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**CB-22850-139**  
SHT 1.1

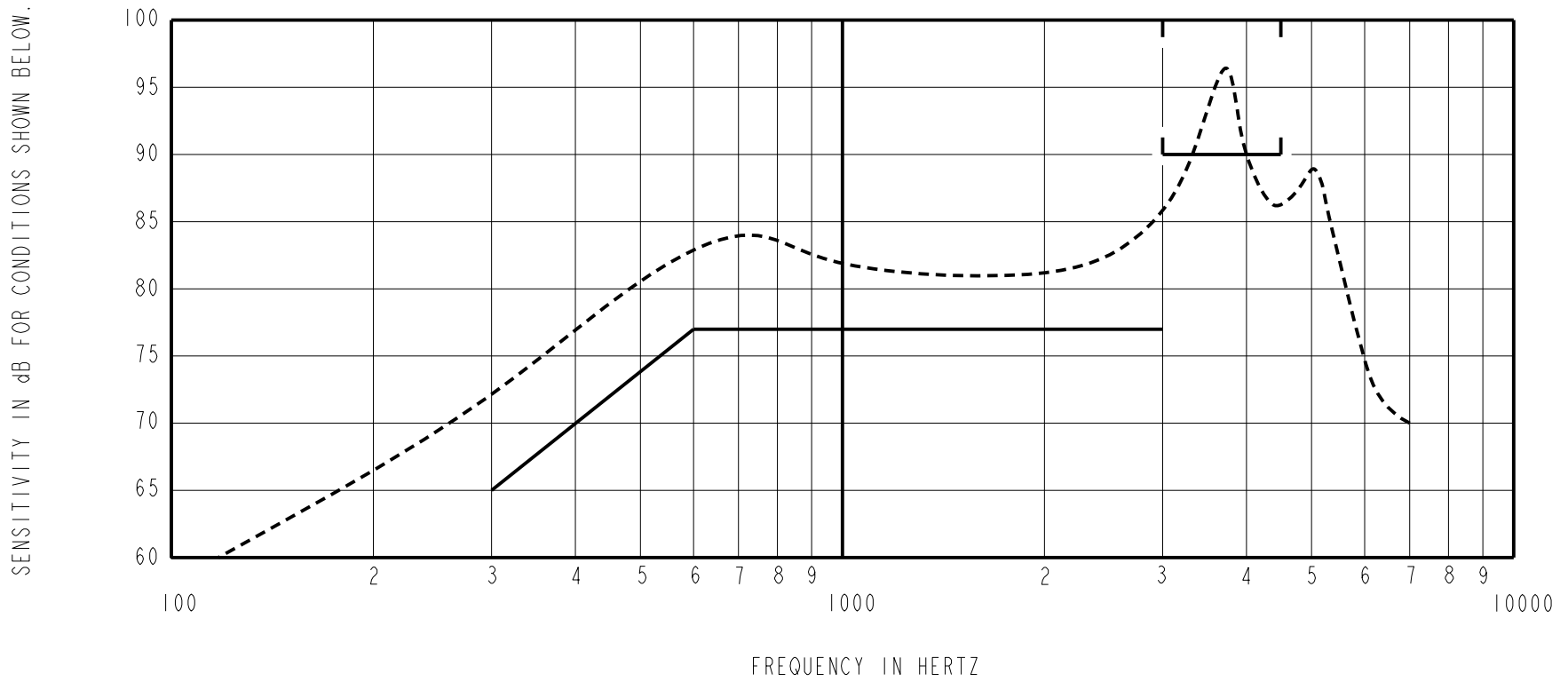


SCALE 1:2  
NOMINAL WEIGHT  
13.5 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION	
A	MI0104834	10-17-12	<b>Active</b>	<b>A</b>	
SCALE: 1:1					DR. BY DATE
DO NOT SCALE DRAWING					LSY 9-20-12
TITLE: MICROPHONE		CB-22850-139		CK. BY DATE	
OUTLINE DRAWING		SHT 1.1		GJP 10-18-12	
				APP. BY DATE	
				GJP 10-18-12	

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1. SENSITIVITY IN dB RELATIVE TO .0002 MICROBAR ( $2 \times 10^{-5}$  N/m<sup>2</sup>) FOR THE CONDITIONS SHOWN IN #2 & #3 BELOW.
2. MEASUREMENTS MADE ON AXIS AT 300mm [11.81in] NORMAL TO THE SOUND PORT UNDER FREE FIELD (ANECHOIC) CONDITIONS. THE REAR PORT IS VENTED INTO A 160 cm<sup>3</sup> DAMPED CAVITY FOR THIS MEASUREMENT.
3. ELECTRICAL SIGNAL (CONSTANT VOLTAGE):  
SOURCE IMPEDANCE: < 0.5 OHMS  
VOLTAGE APPLIED : 1.55 VOLTS RMS
4. NOMINAL IMPEDANCE:  
ACOUSTICAL CONDITIONS: SEE #2 ABOVE  
ELECTRICAL CONDITIONS: SEE #3 ABOVE  
IMPEDANCE AT 500 Hz : 48 OHMS  
IMPEDANCE AT 1 kHz : 48 OHMS
5. TOTAL HARMONIC DISTORTION:  
ACOUSTICAL CONDITIONS: SEE #2 ABOVE  
ELECTRICAL CONDITIONS: SEE #3 ABOVE  
FREQUENCY : 500 Hz  
DISTORTION : 15% MAX.
6. NOMINAL DC RESISTANCE @ 20°C: 21.5 OHMS
7. SENSITIVITY

FREQUENCY	MIN.	MAX.
300	55.0	---
600	67.0	---
3000	67.0	---
3000-4500	80.0	90.0
8. RETEST FOR "GOLDEN EAR" TEST, 100 Hz - 4kHz, WITH 3.8 V SUPPLY VOLTAGE.

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A	MI0104834	10-17-12	<b>Active</b>	<b>A</b>

<p>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</p>	DR. BY	DATE	
	LSY	9-20-12	
	CK. BY	DATE	
	GJP	10-18-12	
TITLE:		APP. BY	DATE
<b>MICROPHONE</b>		GJP	10-18-12
PERFORMANCE SPECIFICATION			
<b>CB-22850-139</b>			
<b>SHT 2.1</b>			

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