



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Part No: CLS0231MA3E-L152

Date: 7/03/2007

Unit: mm

Description: speaker

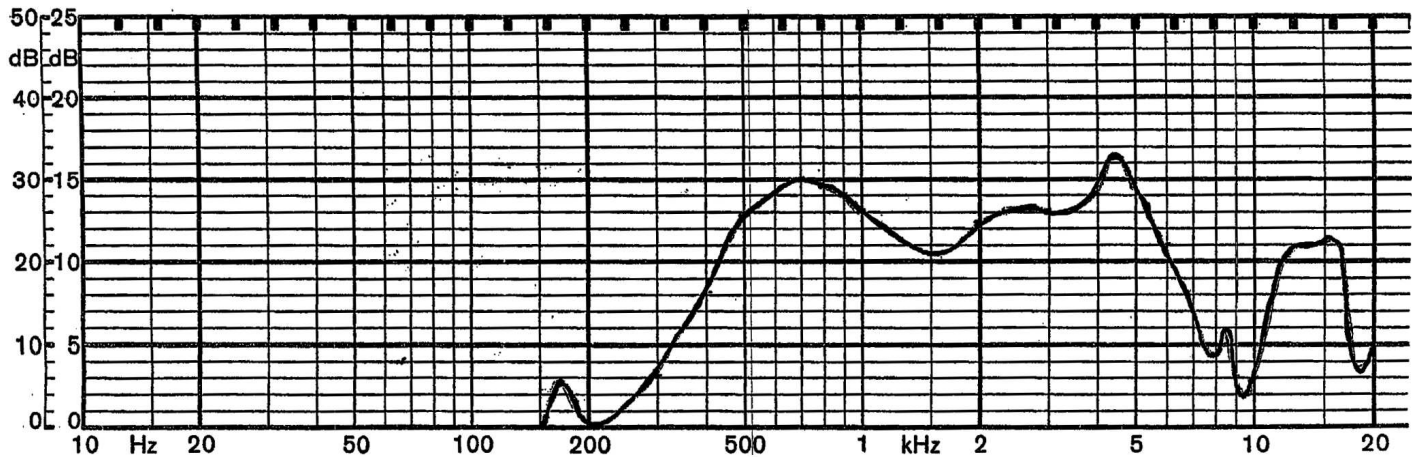
Page No: 1 of 2

Specifications

Nominal Size	23 mm		
Impedance	32 Ohm \pm 15%	at	1 KHz 1 V
Resonant frequency	680 Hz \pm 136 Hz	at	1 V
Sound pressure level	84 dB/w \pm 3 dB	0.2 w 50 cm ave. at 1K, 1.2K, 1.5K, 2K Hz	
Response	Fo Hz ~ 7 KHz max 10 dB		
Input power	Nominal 0.2 W	Handling capacity	0.4 W
Operation	must be normal at program source 0.2 W		
Buzz, rattle, etc.	must be normal at sine wave 2.53 V		
Magnet	Size: 8 x 1 mm		
Load test	White noise	0.2 W for	24 hours
Heat test	60 \pm 2° C	20-50% R.H.	24 hours
Humidity test	40 \pm 2° C	90-95% R.H.	24 hours

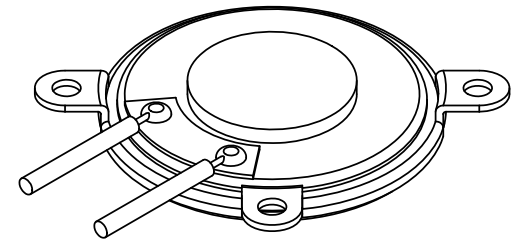
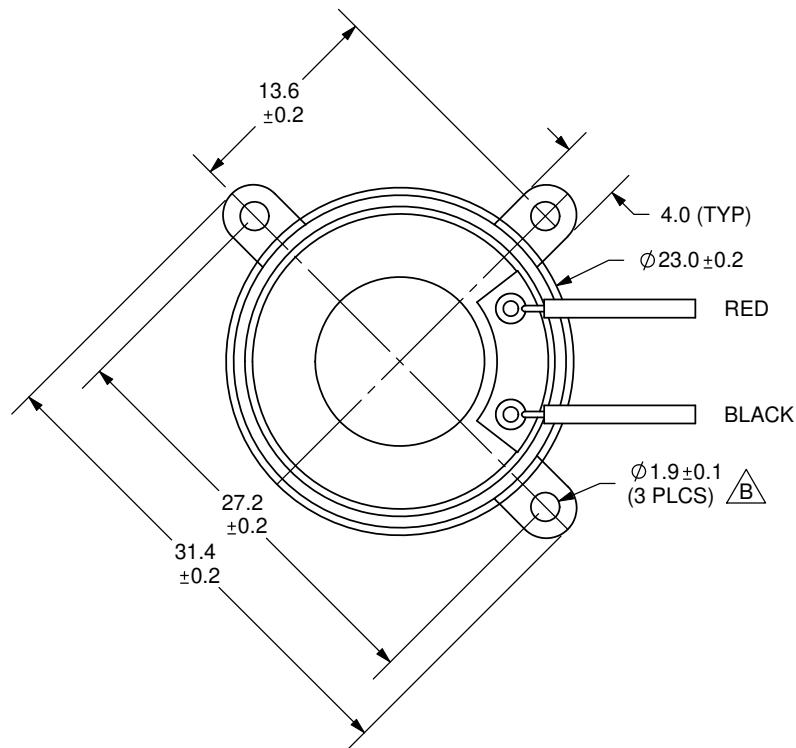
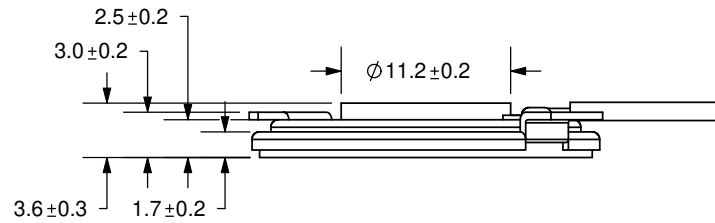
Frequency Response Curve

Potentiometer range	50 dB
Rectifier	RMS
Lower limit frequency	20 Hz
Wr. speed	100 mm/sec



Zero level 60 dB

REV.	DESCRIPTION	DATE
A	NEW DRAWING	7/3/2007
B	added mounting hole dimension	1/31/2008



SPECIFICATIONS:
WIRE: UL1007, #28AWG
LENGTH: 152mm

TOLERANCE:
±0.5mm UNLESS OTHERWISE
SPECIFIED



20050 SW 112th Ave.
Tualatin, OR 97062
Phone: 503-612-2300
800-275-4899
Fax: 503-612-2383
Website: www.cui.com

TITLE: LOW PROFILE SPEAKER		REV: B
PART NO. CLS0231MA3E-L152	UNITS: MM [INCHES]	
DRAWN BY: ZRJ	APPROVED BY:	SCALE: 2:1

PC FILE NAME:
CLS0231MA3E-L152

COPYRIGHT 2008 BY CUI INC.