



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



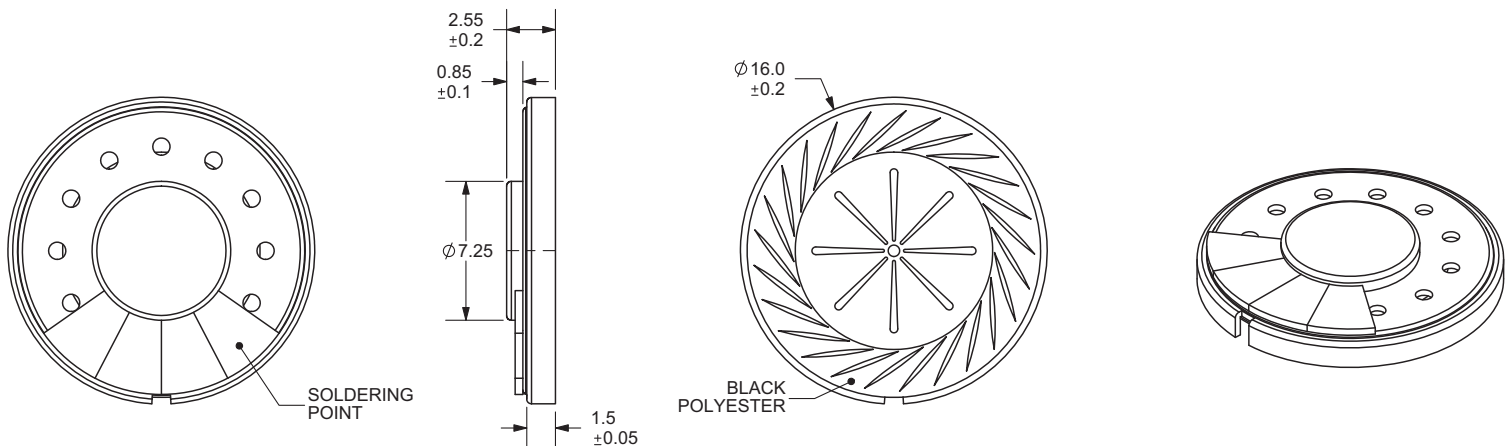
PART NUMBER: CDMG16008-03

DESCRIPTION: LOW PROFILE SPEAKER

SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
input power	max. power: IEC-60268-5, filter 60 s on / 120 s off, 10 cycles at room temp		0.3	0.5	W
impedance	at 1 kHz, 1 V	6.8	8	9.2	Ω
resonant frequency	at 1 V	480	600	720	Hz
sound pressure level	0.3 W, 10 cm ave. at 1, 1.2, 1.5, 2 kHz	79	82	85	dB
	1 W, 1 m ave. at 1, 1.2, 1.5, 2 kHz	66	69	72	dB
response		600		20,000	Hz
distortion	at 1 kHz, 0.3 W			10	%
buzz, rattle, etc.	must be normal at sine wave 1.55 V				
operating temperature		-20		55	$^{\circ}\text{C}$
dimenstions	$\varnothing 16 \times 2.55 \text{ mm}$				
weight			1.5		g
material	metal				
RoHS	yes				

APPEARANCE DRAWING

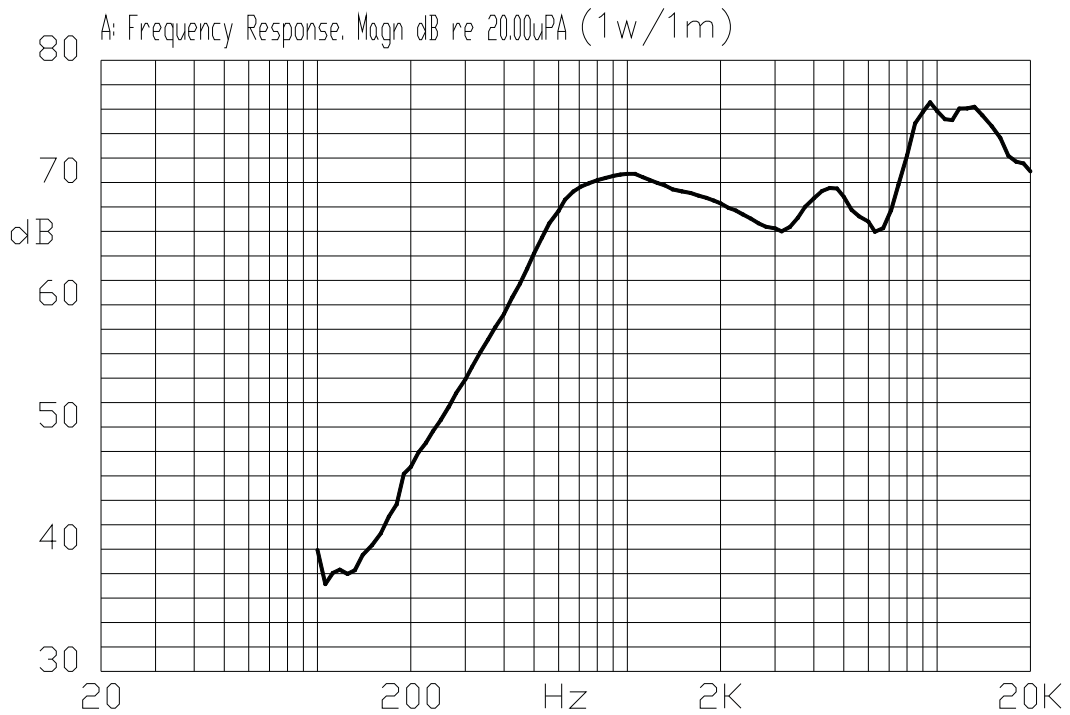
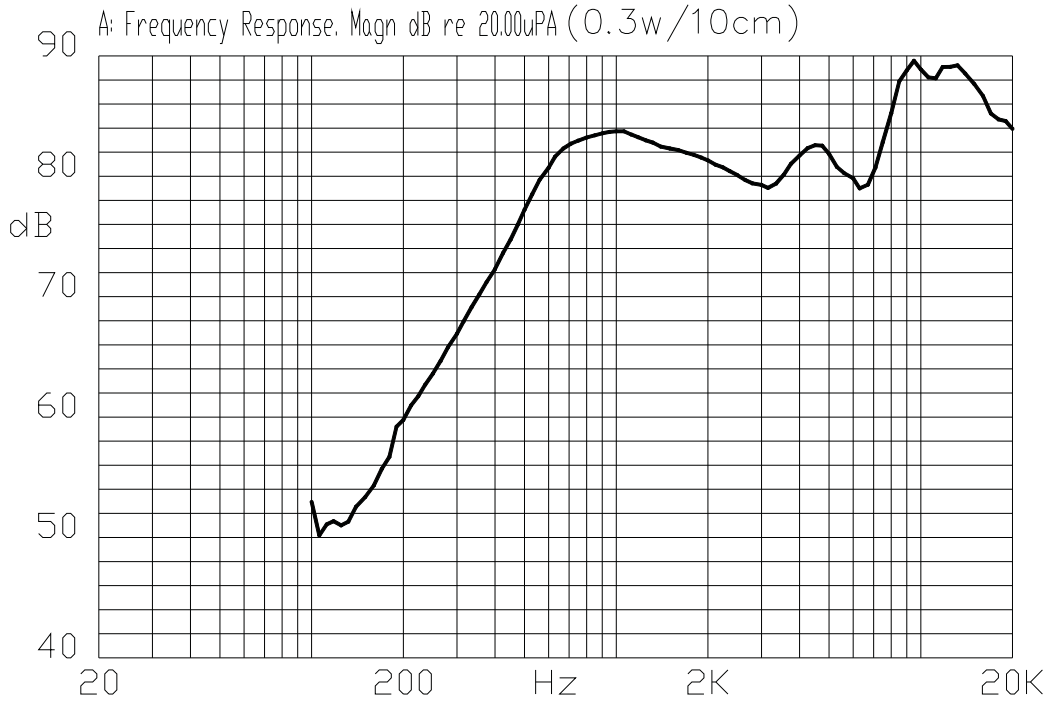




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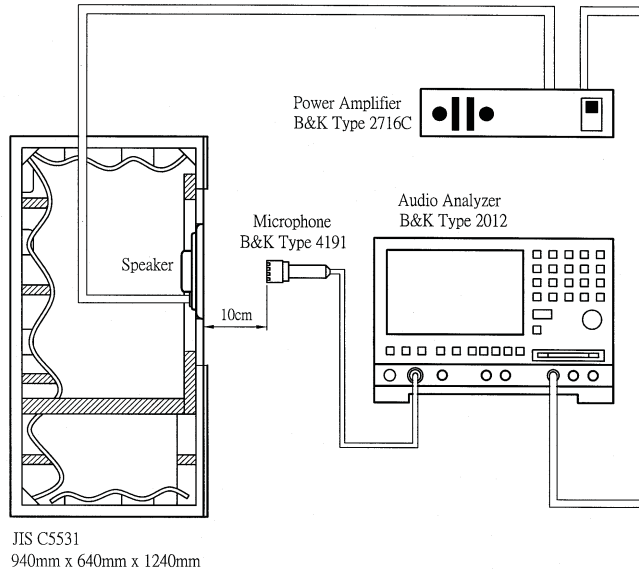
FREQUENCY RESPONSE



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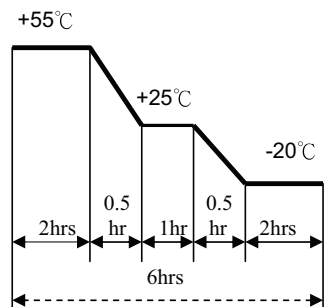
MEASUREMENT METHOD



MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
PCB wire pull strength	The pull force will be applied to double lead wire: horizontal 3.0 N (0.306 kg) for 30 seconds	No damage or cutting off
vibration test	The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz.
drop test	The buzzer without packaging is subjected to 10 drops on each axis from the height of 75 cm onto a 40 mm thick wooden board.	

ENVIRONMENT TEST

item	test condition	evaluation standard
high temperature test	After being placed in a chamber at +55°C for 96 hours.	The speaker will be measured after being placed at +25°C for 6 hours. No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements.
low temperature test	After being placed in a chamber at -20°C for 96 hours.	
humidity test	After being placed in a chamber at +40°C and 90 ±5% RH for 240 hours.	
temperature cycle test	The part will be subjected to 10 cycles. One cycle will consist of: 	

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RECOMMENDED TEMPERATURE PROFILE FOR HAND SOLDERING

370±10°C / 3±1 Sec

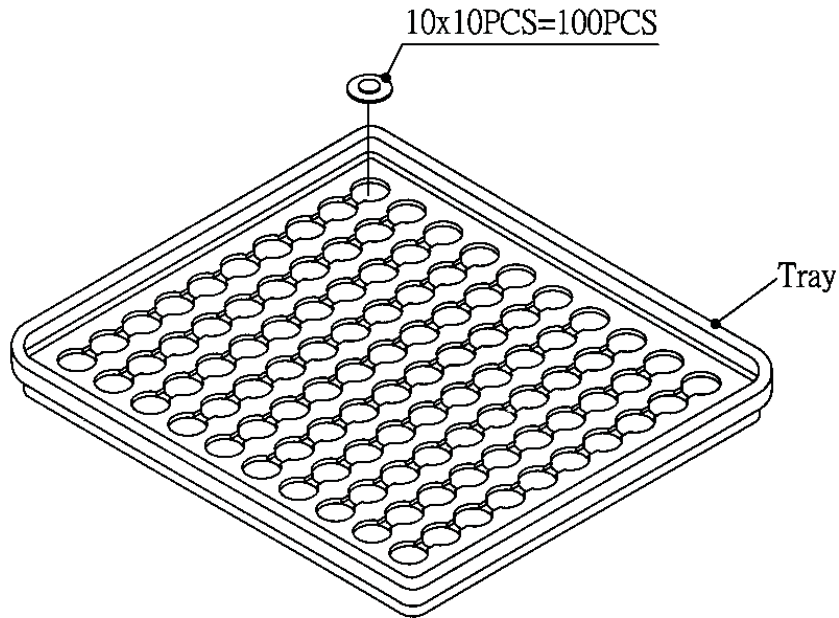
RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	1. Load test: The part will be subjected to 24 hours of continuous white noise at 0.3 W at room temperature.	The speaker will be measured after being placed at +25°C for 6 hours. No obstacle will be harmful to normal operation; damages, cracks, rust, and distortions. Should not be audible at 1.55 V sine wave between Fo ~ 20KHz. The Fo should meet initial measurements. SPL should be within ±3dB compared to the initial measurements.

TEST CONDITIONS

standard test conditions	a) Temperature: +5 ~ +35°C	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: +25 ±2°C	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

PACKAGING



Tray	216mmx196mmx20.4mm	1x100PCS=100PCS
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