

RoHS  
Compliant



## Features

- 50mm dynamic speaker
- 8Ω, 3W max.
- Mylar cone
- Widely used in products that require voice, music & sound reproduction.
- Applications include Access & Security, Medical Products, Parking Meters, Lift Panels, Toys & Games, PDAs, Computers.

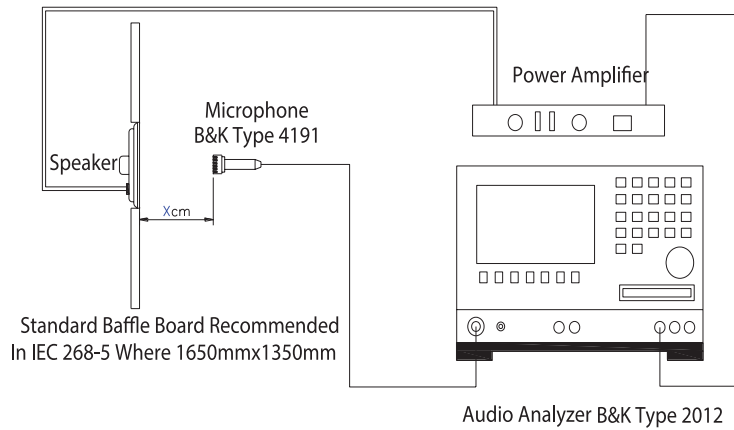
## Specifications

Dimension	: $\phi 50 \times 18.2H$
Rated Input Power	: 2W
Max Input Power	: 3W
Rated Impedance	: $8 \pm 15\% \Omega / 1KHz/1V$
Resonance Frequency(f <sub>0</sub> )	: $400 \pm 20\% Hz/1V$
Sound Pressure Level	: $84 \pm 3 dB$ at (AVG1.0,1.2,1.5,2.0)KHz 1w/1m baffleboard (IEC)
Frequency Range	: FOHZ to 17KHz
Total Harmonic Distortion	: 5%MAX. at 1KHz, 1.0W
Polarity	: When a positive DC Current is applied to the voice coil terminal marked +or red ,the diaphragm shall move forward
OperationTest	: Must be normal at sine wave and program source 2W.
Buzz,Rattle,etc.	: Should not be audible at 4.0V sine wave between (FO Hz to 10kHz)
TOTAL WEIGHT	: $47g \pm 10\%$
Magnet (Ferrite)	: $\phi 28.5mm \times 12.5mm \times 5mm$
Appearance	: Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.
Operating Temp. Range	: $-40^{\circ}C$ to $+80^{\circ}C$
Storage Temp. Range	: $-40^{\circ}C$ to $+80^{\circ}C$

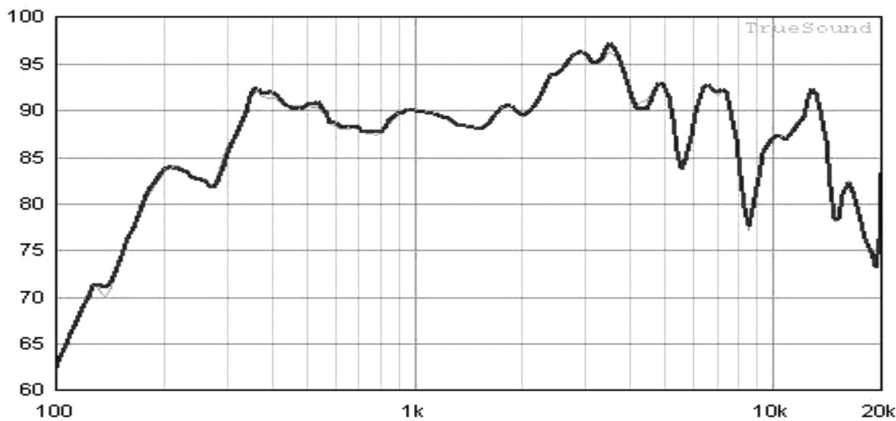
## ENVIRONMENTAL TEST

High temp. Test	: Keep 96 hours at $+80^{\circ}C \pm 3^{\circ}C$ and leave 3 hours in normal temperature and then check
Low temp. Test	: Keep 96 hours at $-40^{\circ}C \pm 3^{\circ}C$ and leave 3 hours in normal temperature and then check
Humidity test	: Keep 96 hours at $+40^{\circ}C \pm 3^{\circ}C$ relative humidity $90 \pm 5\%$ and leave 3 hours in normal temperature and then checked.
Thermal cycle test.	: Low temperature: $-40^{\circ}C \pm 3^{\circ}C$ , temperature: $+80^{\circ}C \pm 3^{\circ}C$ , cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
Vibration	: Speaker shall be measured after being applied vibration of amplitude of 1.52mm with 10 to 55Hz band of vibration frequency to each of X, Y, Z 3 direction for 2 hours
Drop test	: Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm
Load test	: Rated Power white noise is applied for 96 hours
Terminal strength test	: Capable of withstand 1N load for 30seconds without resulting in any damage or rejection.

## Standard test condition of speaker



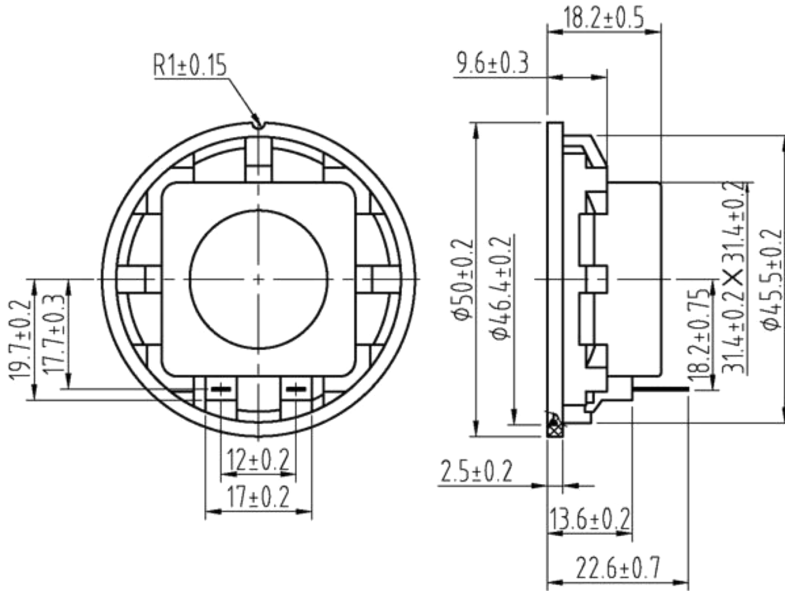
## Frequency Response Curve



## Material Specification

No.	Part Name	Q'ty	Material
1	Frame	1	PP
2	PCB Terminal		SPCC
3	Magnet		Ferrite
4	Yoke		SPCC
5	Voice Coil		Cu
6	Diaphragm		Mylar
7	CAP		

## Diagram



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Dynamic speaker, 50mm, 8Ω, 3W	MCABS-280-RC

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 sg.element14.com/b/multicomp-pro