

## BGC-D40-22-4-002 v.01ef

### 40MM GLASS-CONE-DIAPHRAGM FULL RANGE SPEAKER

GAIT 40mm glass-cone-diaphragm speaker.

#### FEATURE HIGHLIGHTS:

- 3D Glass cone diaphragm in 0.21mm thickness by ion-strengthened Glass
- Worldwide patent pending diaphragm structure
- High power handling : 5W (continuous), 15W (transient)
- Peak-to-peak excursion of 5mm
- Excellent performance in high frequency due to high speed of sound propagation in SiO<sub>2</sub>
- Perfect piston motion in low frequency due to high Young Modulus of ion-toughened glass
- Dual NdFeB magnets for high linearity and high sensitivity
- Brand logo in front version available upon request.
- Water-proof version available upon request

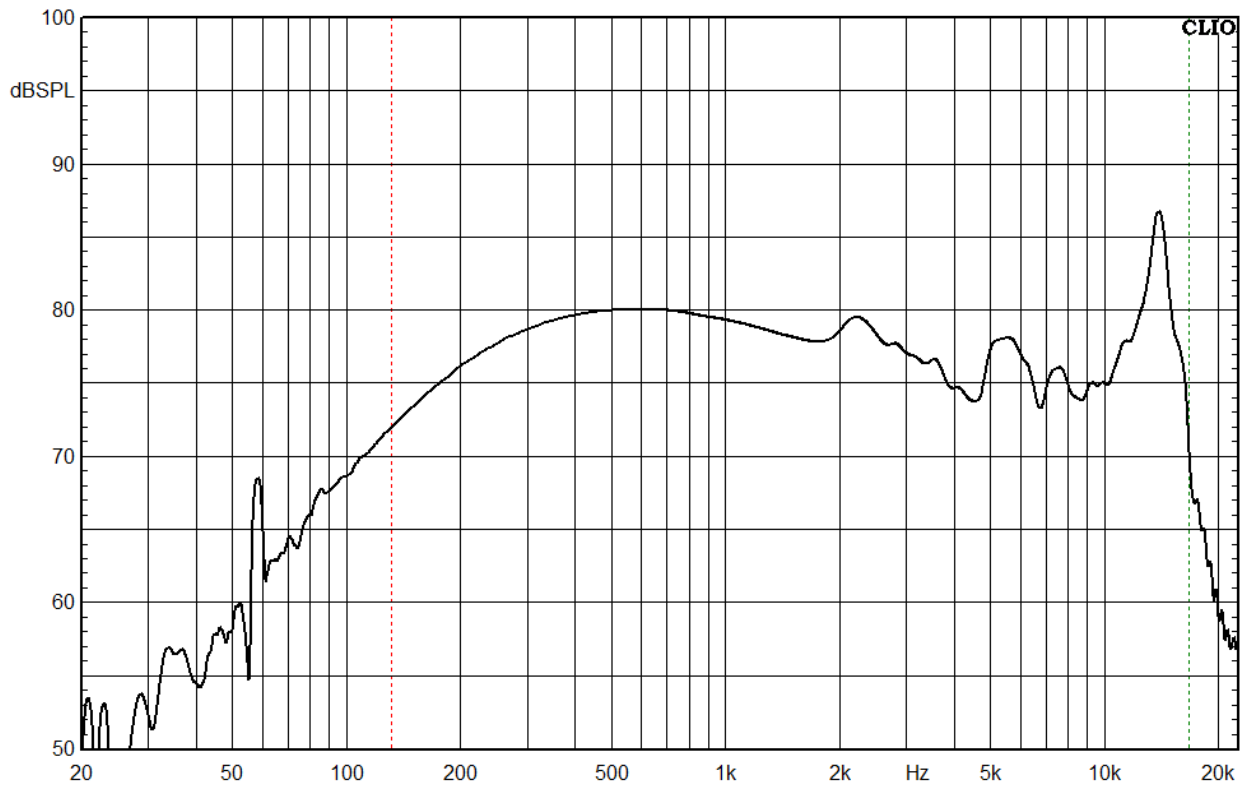
#### APPLICATIONS:

- Portable Bluetooth / WiFi speakers.
- As wide-range tweeters in 2-way or 2.1 systems.
- Satellites in 5.1 surround systems.
- As wide-range tweeter in MTM configurations.
- High-end soundbars, directional speaker arrays.
- As tweeter array in floor-standing speakers. (Exotic High-damping zinc alloy frame version available upon request)
- Fancy LED-lighting with speaker applications.
- Artistic home-audio and HiFi.
- DIYers and enthusiasts.
- Marine applications.

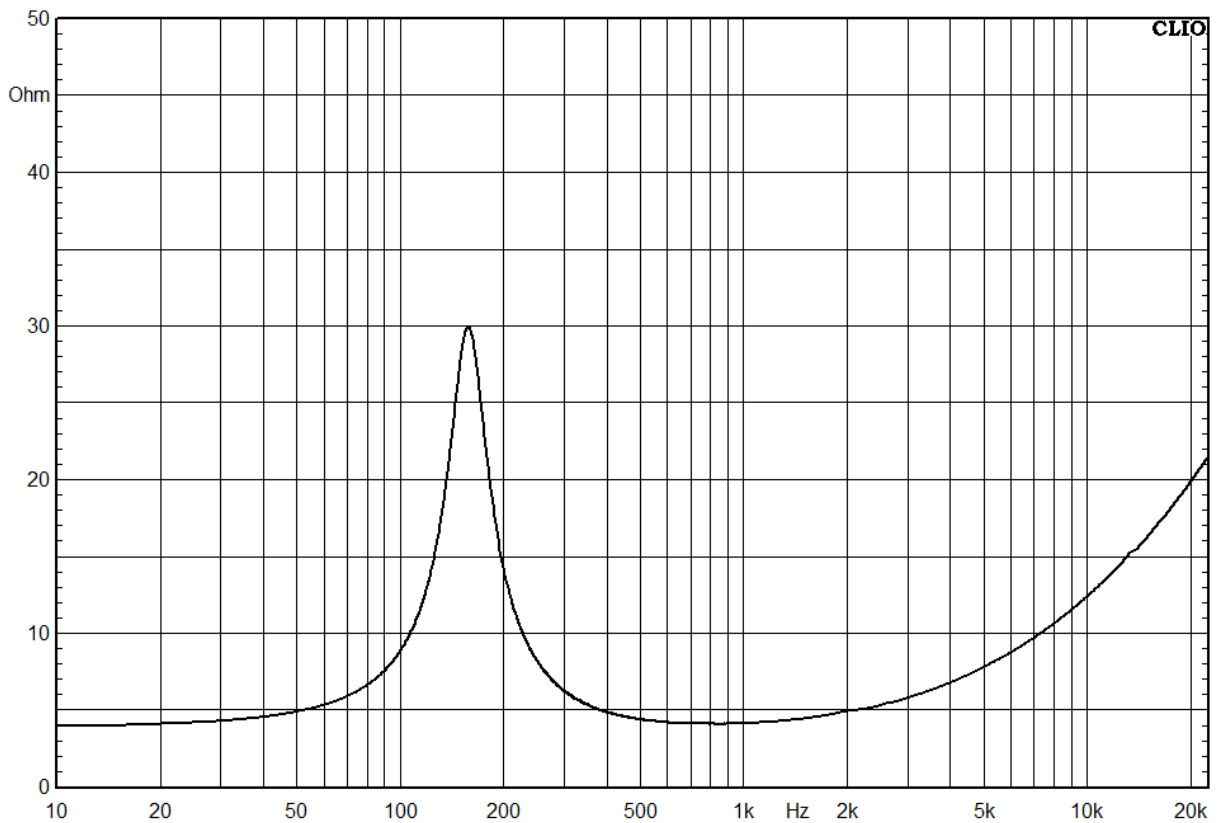


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## FREQUENCY RESPONSE:

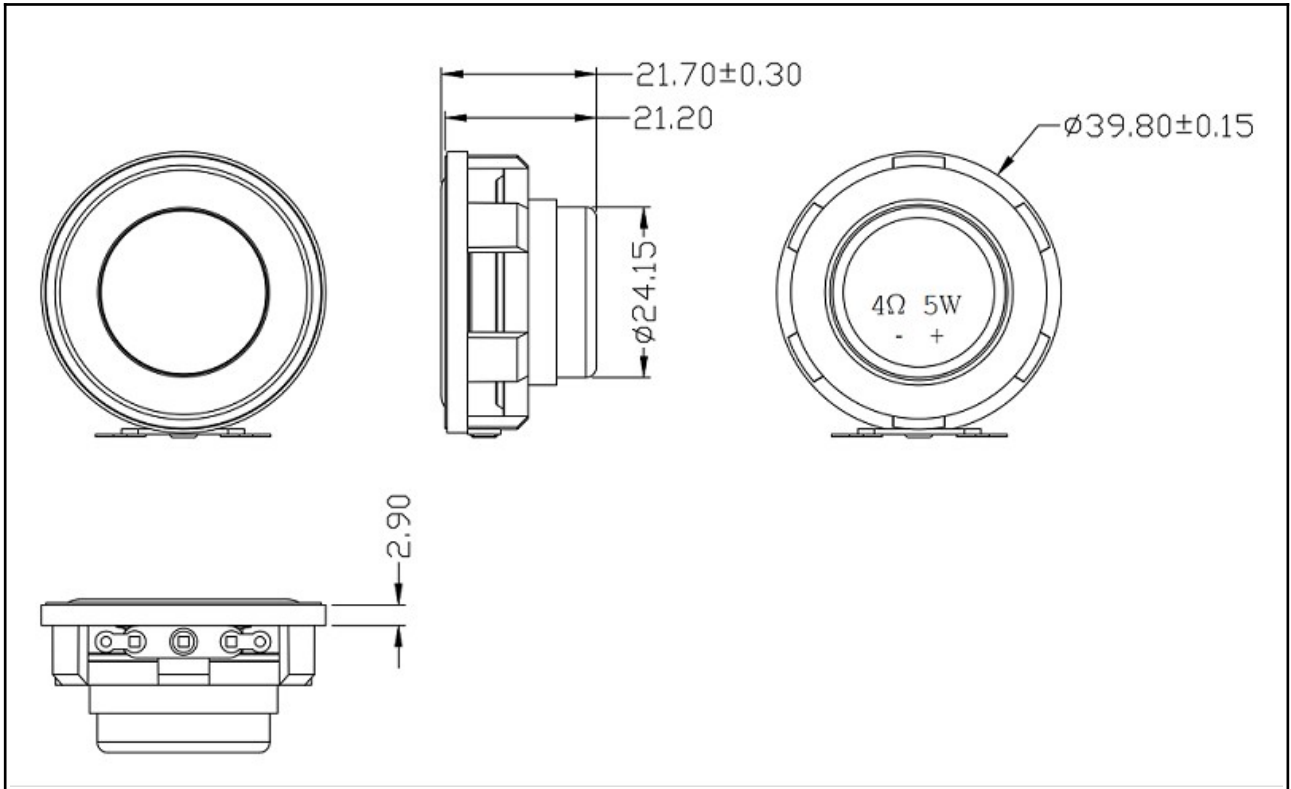


## IMPEDANCE CURVE VS FREQUENCY:



DRAWINGS AND DIMENSIONS:

All units are in mm unless specified.





ELECTRICAL, ACOUSTICAL, AND THIELE/SMALL PARAMETERS:

Parameter	Min.	Typical	Max.	Testing Conditions
DC Resistance ( $R_e$ )		4 $\Omega$		
Resonance Frequency ( $F_s$ )		160Hz		
Continuous Power (thermal)		5W		
Max. Power (transient)		15W		
Excursion, peak-to-peak ( $X_{max}$ )		5mm		
Moving Mass ( $M_{ms}$ )		1.4g		
Effective Radiating-area ( $S_d$ )		8 cm <sup>2</sup>		
Force Factor (BL)		3.22		
Specific Force Factor (BL/ $\sqrt{R_e}$ )		1.61		
Compliance, free-air ( $C_{ms}$ )		0.72mm/N		
Mechanical Q Factor ( $Q_{ms}$ )		2.75		
Electrical Q Factor ( $Q_{es}$ )		0.49		
Total Q Factor ( $Q_{ts}$ )		0.42		
Eqv. Compliance Volume ( $V_{as}$ )		0.07L		
Voice Coil Inductance ( $L_e$ )		0.04mH		
Diaphragm Displacement Volume, peak-to-peak( $V_d$ )		4.8 cm <sup>3</sup>		
Sensitivity (1W/0.5m@1kHz)		86dBSpl		
NdFeB magnet rating		N35		
NdFeB main magnet weight		11.3g		
NdFeB auxiliary magnet weight		2.8g		
Voice-coil magnet wire weight		0.76g		
Driver Weight		38g		
Voice-coil magnet wire grade		EISV		
Max. Voice-coil Temperature		165		
Operating Temperature		-10 to 40 °C		
Storage Temperature		-20 to 70 °C		