

BDNC (Holding) Ltd. / Glass Acoustic Innovations Technology Co., Ltd, Revised at 25th Mar, 2022

BGC-D40-22-4-002 v.01d

40mm GLASS-CONE-DIAPHRAGM FULL RANGE SPEAKER

STAPEZ[™] brand 40mm glass-cone-diaphragm speaker.

Feature Highlights:

- 3D Glass cone diaphragm in 0.23mm thickness by Asahi Dragontrail ion-toughened 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 SiO2
- Perfect pistonic 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.



1:1 size in A4 paper



DRAWINGS AND DIMENSIONS:

All units are in mm unless specified.



IMPEDANCE CURVE VS FREQUENCY:





ELECTRICAL, ACOUSTICAL, AND THIELE/SMALL PARAMETERS:

Parameter	Min.	Typical	Max.	Testing Conditions
DC Resistance (Re)		4 Ω		
Resonance Frequency (Fs)		140Hz		
Continuous Power (thermal)		5W		
Max. Power (transient)		15W		
Excursion, peak-to-peak (Xmax)		5mm		
Moving Mass (Mms)		1.4g		
Effective Radiating-area (Sd)		8 cm ²		
Force Factor (BL)		3.24		
Specific Force Factor (BL/√Re)		1.62		
Compliance, free-air (Cms)		0.82mm/N		
Eqv. Compliance Volume (Vas)		0.07L		
Voice Coil Inductance (Le)		0.04mH		
Diaphragm Displacement Volume, peak-to-peak(Vd)		4.8 cm ³		
Sensitivity (2V/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 ^o C		
Storage Temperature		-20 to 70 ^o C		