

## BGC-D40-22-4-004 v.01b

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

#### FEATURE HIGHLIGHTS:

- 3D Glass cone diaphragm in 0.2mm 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 pistonic motion in low frequency due to High Young Modulus of ion-strengthened glass
- Dual NdFeB magnets for high linearity and high sensitivity
- Brand logo in front version available upon request.
- Water-proof version available upon request

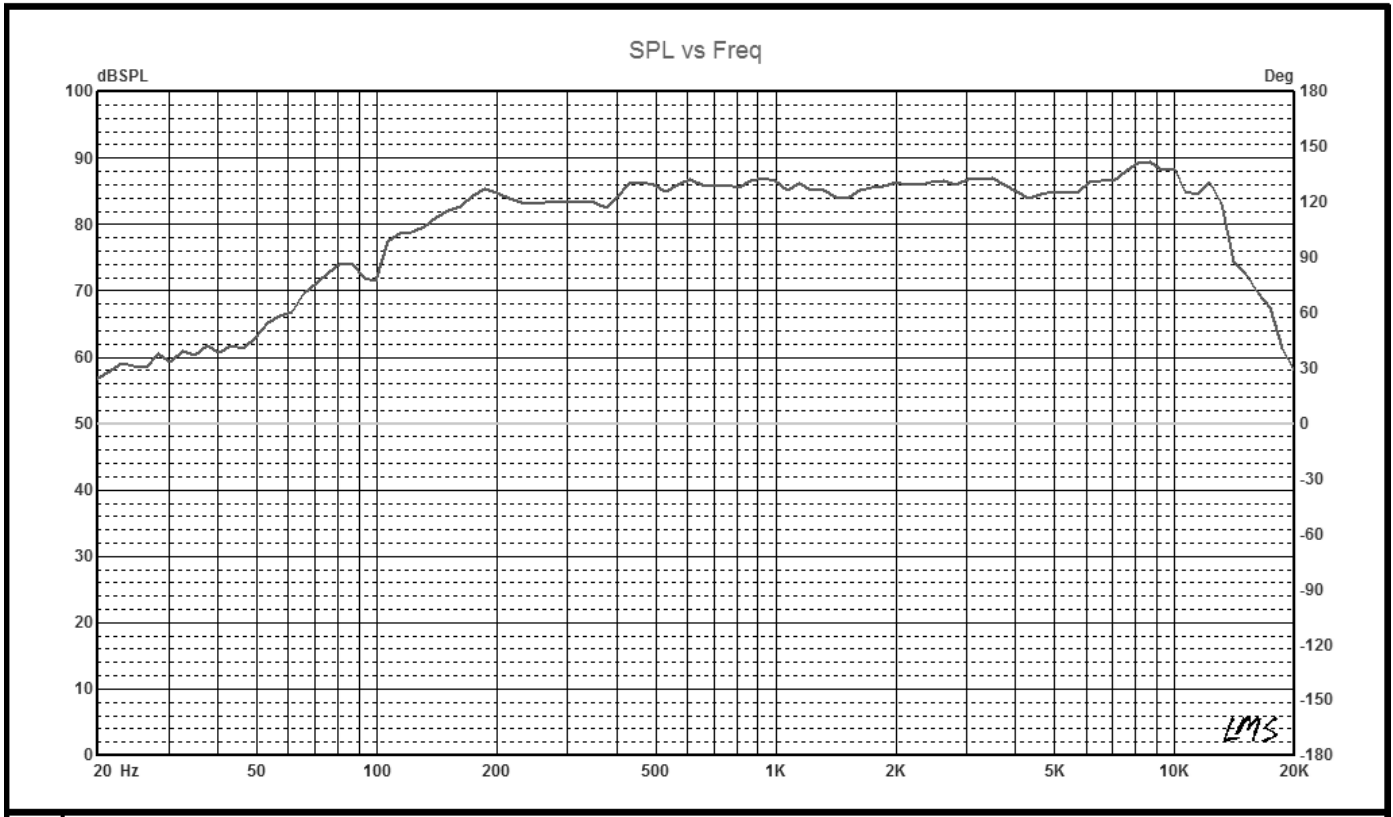
#### APPLICATIONS:

- Portable Bluetooth / WiFi speakers with LED lighting.
- 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.

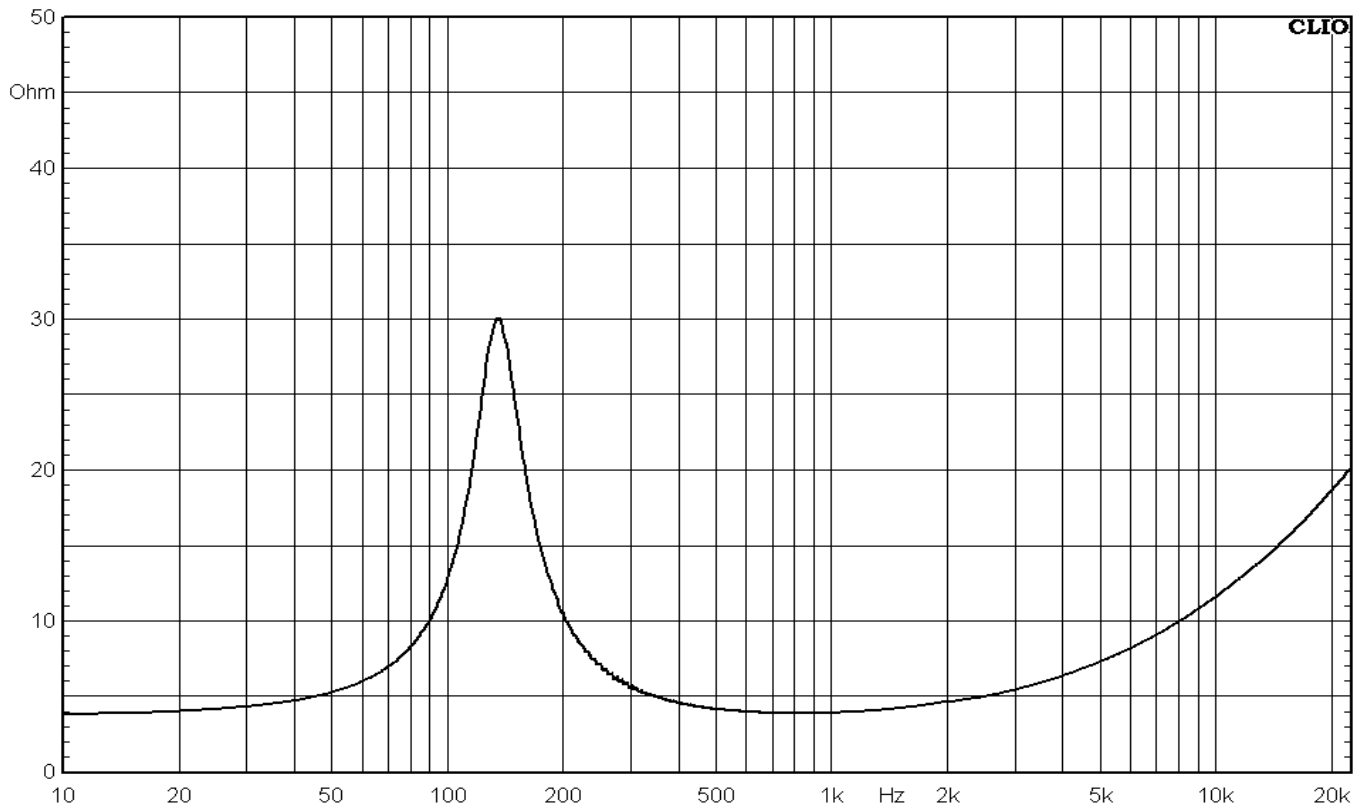


1:1 size in A4 paper

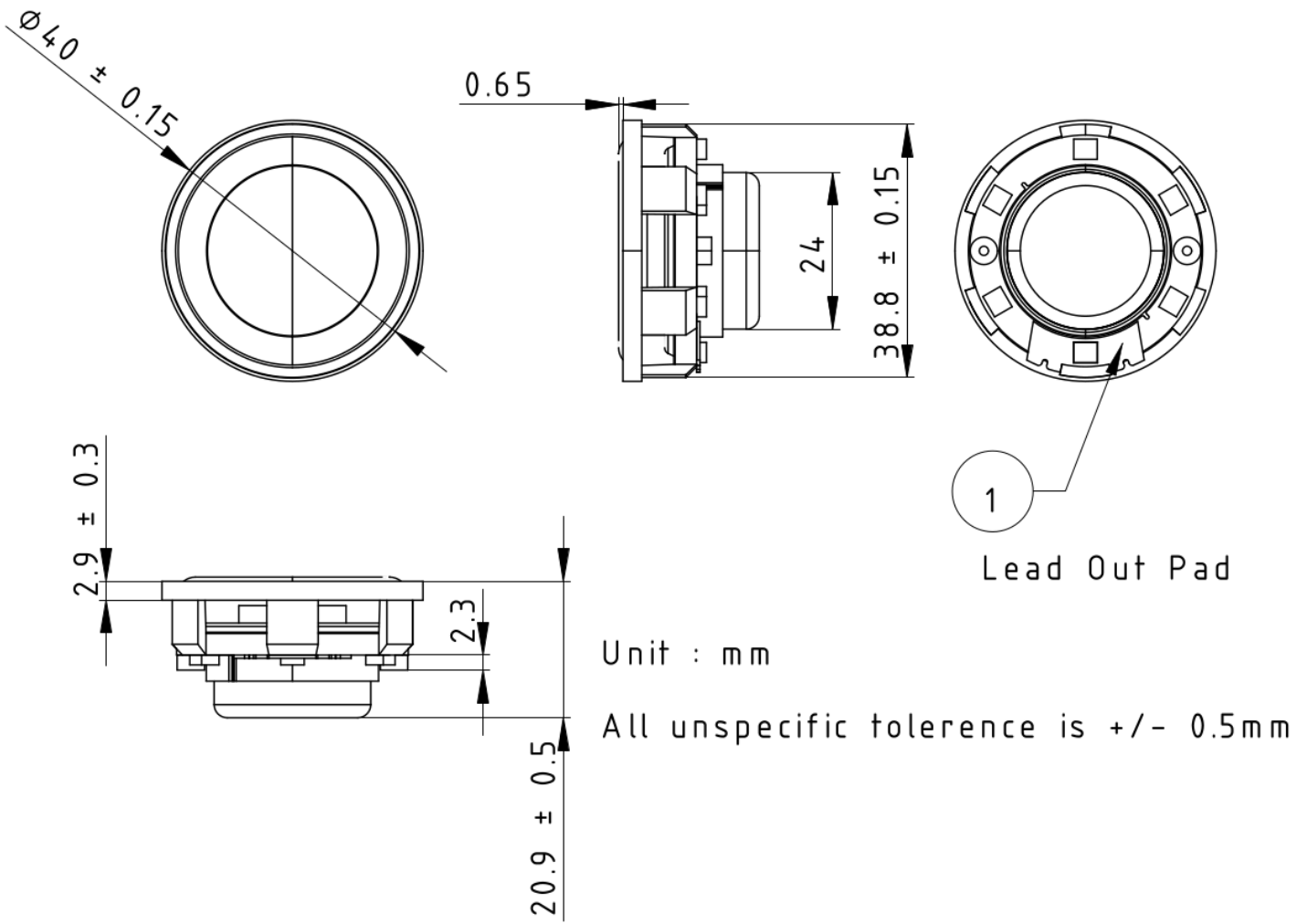
## FREQUENCY RESPONSE:



## IMPEDANCE CURVE VS FREQUENCY:



DRAWINGS AND DIMENSIONS:





ELECTRICAL, ACOUSTICAL, AND THIELE/SMALL PARAMETERS:

Parameter	Min.	Typical	Max.	Testing Conditions
DC Resistance (Re)		3.7Ω		
Resonance Frequency (Fs)		135Hz		
Continuous Power (thermal)		5W		
Max. Power (transient)		15W		
Excursion, peak-to-peak (Xmax)		5mm		
Moving Mass (Mms)		1.15g		
Effective Radiating-area (Sd)		8 cm <sup>2</sup>		
Force Factor (BL)		2.70		
Specific Force Factor (BL/√Re)		1.40		
Compliance, free-air (Cms)		1.2mm/N		
Mechanical Q Factor (Qms)		3.54		
Electrical Q Factor (Qes)		0.50		
Total Q Factor (Qts)		0.44		
Eqv. Compliance Volume (Vas)		0.11L		
Voice Coil Inductance (Le)		0.05mH		
Diaphragm Displacement Volume, peak-to-peak(Vd)		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		