

# BroadBand065 BROADBAND PROJECTOR



Typical Uses: Acoustic Reference Standards, Underwater Positioning Transducers, Environmental Monitoring

## FEATURES



The BroadBand 065 transducer is a horizontally omnidirectional transducer with an integrated tuning circuit (mounted in the anodized aluminum housing) to provide the exceptionally wide flat transmit and receive sensitivity response across the frequency range of 50-110kHz.

It is useful as an acoustic reference standard, for underwater positioning systems or for use in high frequency environmental monitoring systems.

The BroadBand 065 is made with a harder ceramic making it ideal transmitting applications, but is equally useable as a receiver. The BroadBand series are highly reliable transducers and come in a protective, durable polyurethane coating.

## ADVANTAGES

- Wide flat broadband response
- Horizontally omni-directional
- Versatile
- Durable and reliable construction

## ORDER NUMBER

CTG 0811-0260

Please specify any alternative cable, connector and/or calibration requirements with order

## TECHNICAL SPECIFICATION

Nominal resonant frequency (without tuning)	65kHz
Pre amplifier or tuning element	Tuning Element
Receive Sensitivity @ 100 kHz	- 193 dB re 1V/ $\mu$ Pa
Recommended receive frequency range	55-110 kHz
Linear frequency range	N/a
Maximum acoustic input @100kHz	+ 243 dB re 1 $\mu$ Pa
Transmit sensitivity @ 68 kHz	+ 147 dB re 1 $\mu$ Pa/V at 1m
-3dB bandwidth	18 kHz
Quality Factor	3.8
Recommended transmit frequency range	50-110 kHz
Maximum source level @ 68 kHz	+ 197 dB re 1 $\mu$ Pa at 1m
Maximum applied voltage	240Vrms
Low Frequency capacitance (@ 1kHz)	4.5 nF
Horizontal beam pattern	Omnidirectional +/- 3.5 dB at 50 kHz
Vertical beam pattern	Hemispherical

## MECHANICAL SPECIFICATION

Dimensions	Maximum outer diameter 104 mm, Length 180mm
Transducer mass in air	Approximately 0.95 kg
Transducer mass in water	Approximately 0.3 kg
Maximum recommended operating depth	600m
Survival depth	1200m
Operating temperature range	-5 to +35°C
Cable	Flying lead with female connector
Connector	Subconn LPBH5M
Mounting	N/a

## MECHANICAL DRAWING

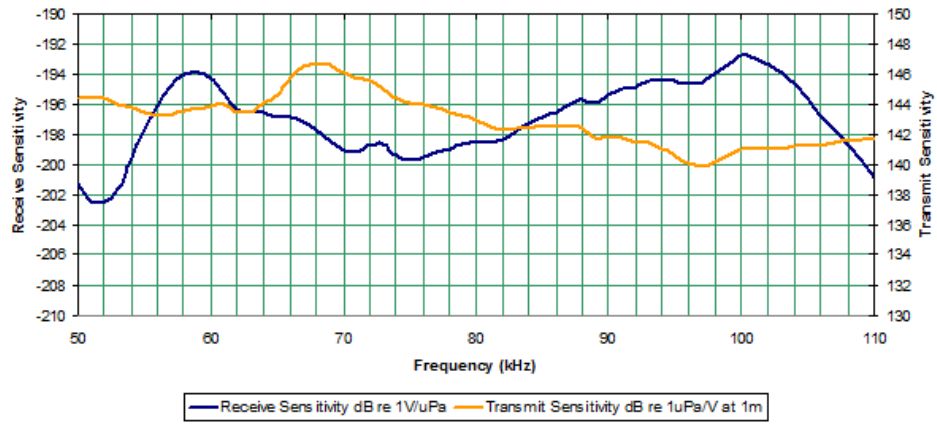
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## CONNECTOR LAYOUT

Pin	Signal Name
1	N/a
2	N/a
3	N/a
4	+Signal
5	-Signal
Screen	Gnd

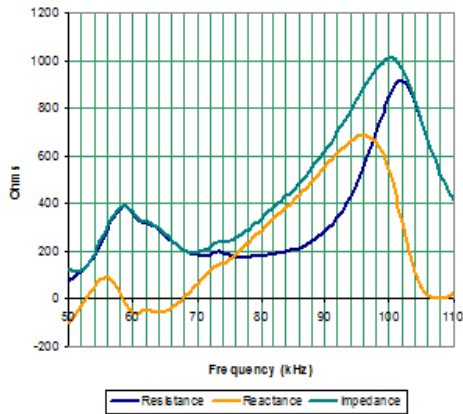
## SENSITIVITY

BroadBand 065 Sensitivity



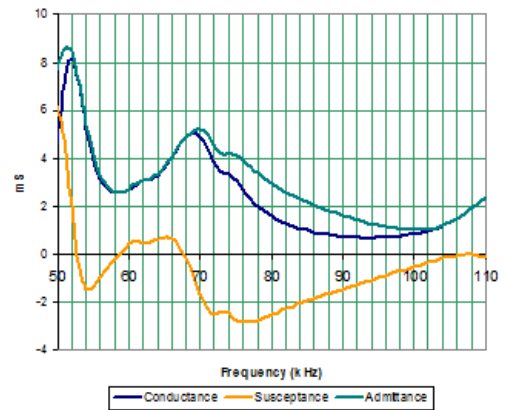
## IMPEDANCE

BroadBand 065 Impedance

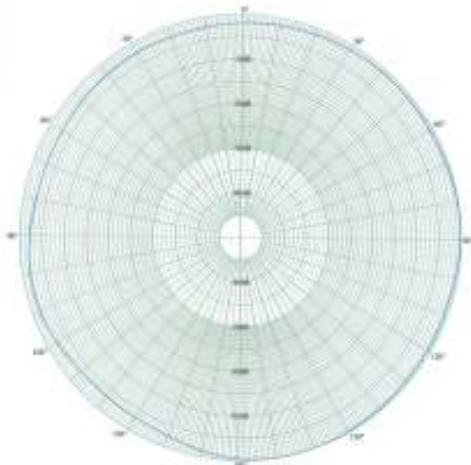


## ADMITTANCE

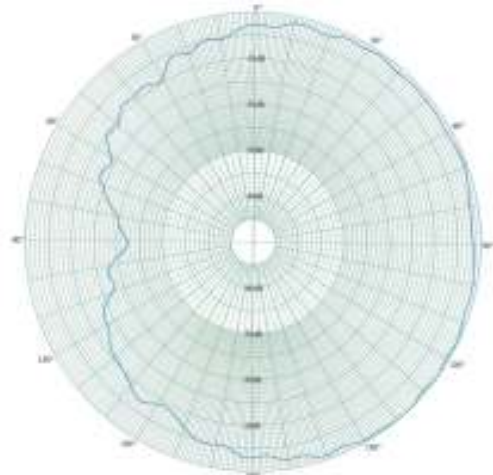
BroadBand 065 Admittance



## HORIZONTAL BEAM PATTERN @ 50 kHz



## VERTICAL BEAM PATTERN @ 50kHz



## VARIATIONS

N/A



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