

Component specification

US1840P-01A

Index **A**

Ultrasonic Sensor

1. General

Operating temperature: -40°C to +100°C Component weight [g]:
Storage temperature: -40°C to +100°C
Contact: PIN Housing color: aluminium
Packageing: tray IP rating:
ESD conform RoHs conform: yes
Remark:

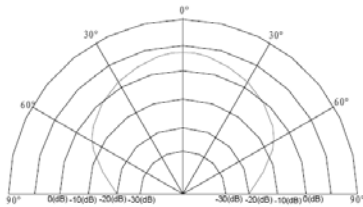
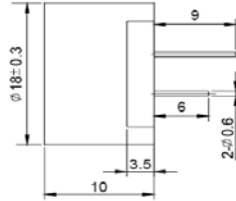
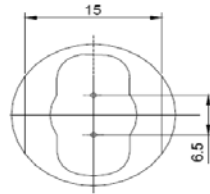


2. Electrical and acoustical specification

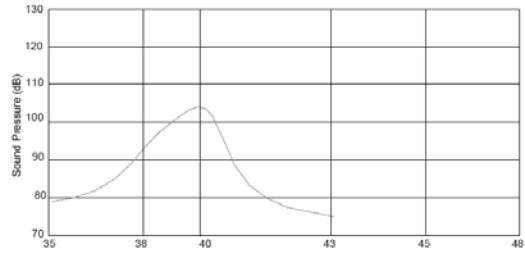
Using method Dual mode
Detectable range [m] 0.2 - 1.5
Center frequency [kHz] 40
Capacity [nF] at 1kHz 2 +/- 20%
Sensitivity [dB/V/μbar] -74
SPL [dBA]: 30cm/10Vrms Sine Wave 100
Maximum voltage [Vpp] 120
Tone constant-pulse:
Polarity:
Remark:
frequency curve:

GREWUS		dimensions without tolerance: +/- 0.5	scale:	
Designed by: Ralf Hinnerichs	19.09.2009	part number: US1840P-01A	index:	Date:
Released by: Ralf Hinnerichs	19.09.2009		A	19.09.2009
drawing number: 400769032		Ultrasonic Sensor		Page 1 of 3

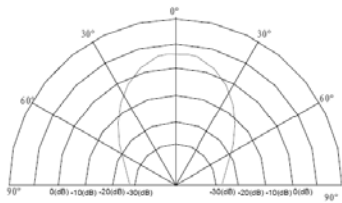
3. Component drawing



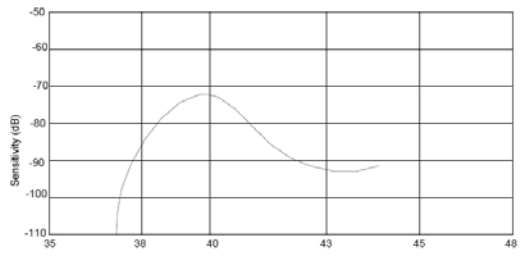
Directivity in X-axis Sensitivity



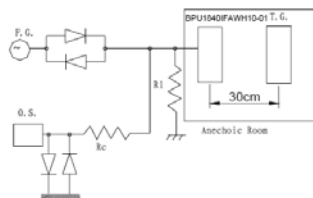
SPL-Freq.Characteristics



Directivity in Y-axis Sensitivity



Sensitivity-Freq.Characteristics



Rt: 3.9K Ω R0=1k Ω
 T.G. :Target
 F.G. :Function Generator
 O.S. :Oscilloscope

GREWUS		dimensions without tolerance: +/- 0.5	scale:	
Designed by: Ralf Hinnerichs	19.09.2009	part number:	index:	Date:
Released by: Ralf Hinnerichs	19.09.2009	US1840P-01A	A	19.09.2009
drawing number: 400769032		Ultrasonic Sensor		Page 2 of 3