



Actuator | Motion | Sensor

# PDU400A11H11

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ROHS



Customer		Model Name	
Customer P/N		Product No.	
Date	31. Jul. 2012	Issue No.	
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## Approval:

- 1.Applications
- 2.Features
- 3.Technical terms
- 4.Drawing
- 5.Beam Pattern
- 6.Test Circuit
- 7.Echo sensitivity/Ringing
- 8.Reliability Test
- 9.Notice
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- 11.History change record

Drawn by	Checked by	Approved by	Customer approved

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## 1.Applications

- 1.1)Level measurement
- 1.2)Automation control
- 1.3)Proximity
- 1.4)Obstacle avoidance
- 1.5)Robotics

## 2.Features

- 2.1) Rugged sealed construction.
- 2.2) Cylindrical design allows for installation in various applications.
- 2.3) Short-range measurement capabilities.

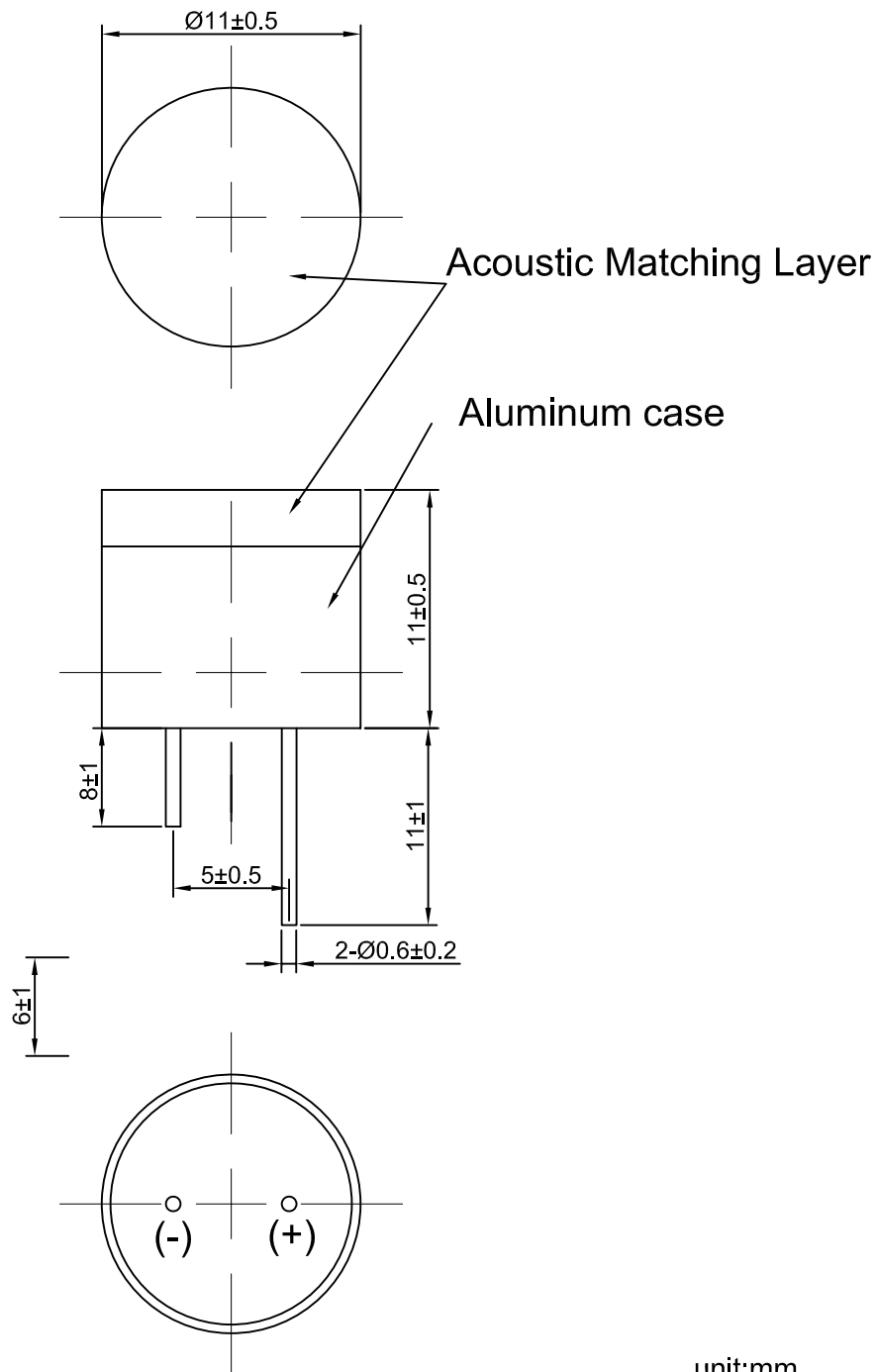
## 3.Technical terms

No.	Item	Unit	Specification
1.	Construction		Water Proof
2.	Using Method		Dual Use
3.	Center Frequency	KHz	400±16
4.	Receive Sensitivity Echo	v	≥0.25V (driver signal: 200Vp-p, 400KHz, at 20cm )
5.	Capacitance	pf	500±30% at1KHz
6.	Max.Input Voltage	Vp-p	300Vp-p
7.	Directivity (-3dB )	°	7±2
8.	Distance of Detection	M	0.05~0.3M
9.	Protection class		IP65
10.	Material		Aluminum
11.	Operating Tem.Range	°C	-40 ~ +85
12.	Storage Tem.Range	°C	-40 ~ +85
13.	Weight	g	1.6

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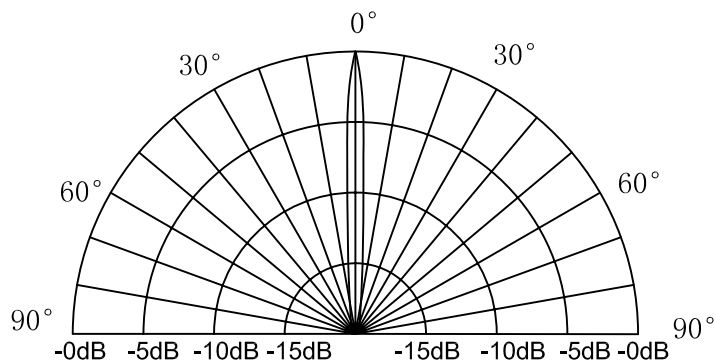
## 4.Drawing



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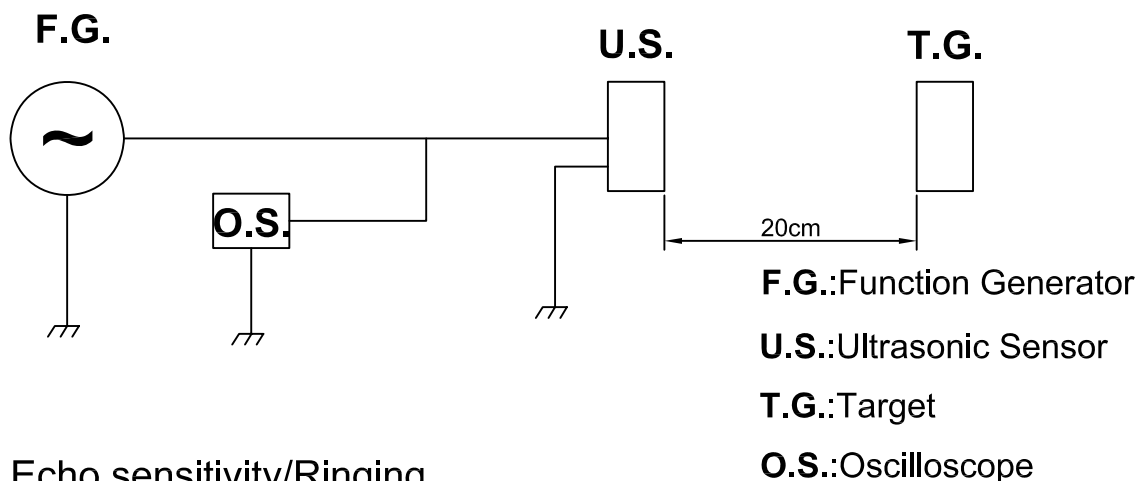
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## 5. Beam Pattern



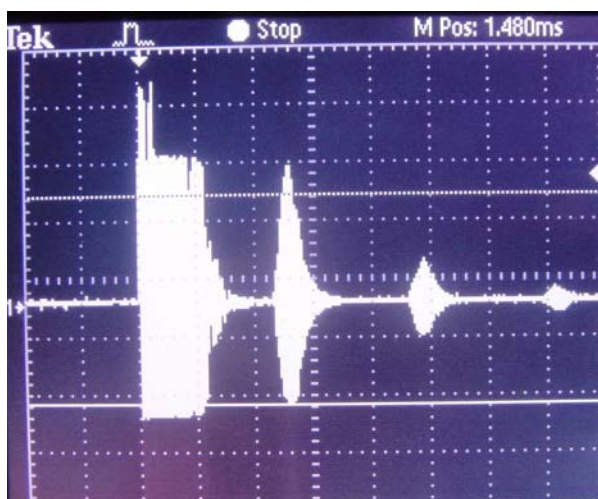
Directivity in Overall Sensitivity

## 6. Test circuit



## 7. Echo sensitivity/Ringing

Driver signal: 200Vp-p, 20cm



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### 8. Reliability Test

#### 8.1 Heat Cycle Test

Temperature must be changed within 1min

Temperature +85±3°C 30min

-40±3°C 30min

Cycles 1000cycles

#### 8.2 Humidity Test

Temperature +85±3°C

Relative Humidity 85%

Duration 1000hrs

#### 8.3 Vibration Test

Vibration Frequency 10~200Hz

Sweep Period 15min

Acceleration 43.12m/s<sup>2</sup> (4.4G)

Direction 3(x,y&z)

Time 96hours/direction

#### 8.4 Drop test

Height 1m onto concrete floor

Times 10 times

After reliability test, all characteristic(Frequency, Ringing time, Sensitivity, etc..) must within -2dB compared to initial condition

Date: 2016.08.18

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## 9. Notice

### 9.1 Export Control <For customers outside The People's Republic of China>

No PD Inc. products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

9.2 Please contact our sales representatives or product engineers before using the products in the specification or catalogue for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this specification.

- a) Aircraft equipment or Aerospace equipment
- b) Undersea equipment and Power plant equipment
- c) Medical equipment and Transportation equipment (vehicles, trains, ships, etc.)
- d) Traffic signal equipment i Disaster prevention / crime prevention equipment
- e) Data-processing equipment including Application of similar complexity and/or reliability requirements to the applications listed above

9.3 Product specifications and catalogues are subject to change and our products in them may be discontinued without advance notice.

Please check with our sales representatives or product engineers before ordering. If there are any questions, please contact our sales representatives or product engineers.

9.4 Please read rating and CAUTION (for storage, operating, rating, soldering, mounting and handling) in this specifications in order to prevent smoking and/or burning, etc.

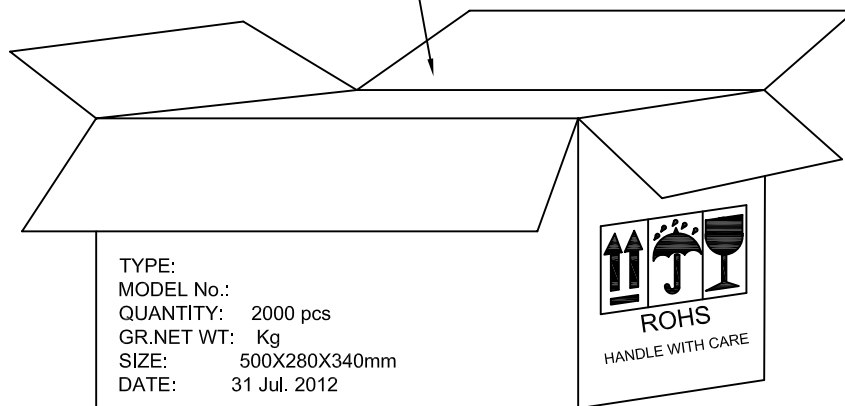
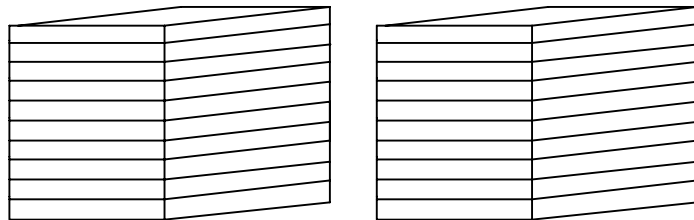
8.5 Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or a third party's intellectual property rights and other related rights in consideration of your use of our products and/or information described or contained in our specifications and catalogues. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.

9.6 No ozone depleting substances (ODS) under the Montreal Protocol are used in our manufacturing process.

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## 10. Packing



TYPE:  
 MODEL No.:  
 QUANTITY: 2000 pcs  
 GR.NET WT: Kg  
 SIZE: 500X280X340mm  
 DATE: 31 Jul. 2012

- 1)50 pcs/tray
- 2)40 trays/carton
- 3)2000 pcs/carton in total
- 4)carton size: 500X280X340mm

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