

Product Specification

Ultrasonic Flow Sensor



Part Number: <u>US0014-001</u>

Model Number: <u>T/R975-US0014L353-01</u>

Overview

The ultrasonic flow sensor is used as the core element of ultrasonic flow meters. Ultrasonic flow measurement uses the transit time principle, whereby opposite sending and receiving ultrasonic flow sensors are used to transmit signals through the flow. The signal travels faster when moving with the flow stream rather than against the flow stream. The difference between the two transit times is used to calculate the flow rate.

Appearance and Dimensions, Unit: mm



Electrical Specifications

			Test Condition
Item	Unit	Standard	T=25 °C
Thick Resonant frequency (Fs)	KHz	975 ± 30	Agilent 4294A
Resonant impedance (R)	Ω	≤ 110	Agilent 4294A
Static capacitance (C ₀)	pF	1150 ± 20%	Digital Bridge At 1000Hz/1V
Storage Temperature	°C	-25 ~ +55	
Operating Temperature	°C	+4 ~ +90	

TENTATIVE RELEASE:

This specification is based on design objectives and is strictly Preliminary and subject to change. Test data may exist, but this specification is subject to change based on the results of additional testing and evaluation. Application specific specifications will be produced for approval prior to product being released.

	Part No.	Rev	Title	Sheet No.
U	S0014-001	A5	Ultrasonic Flow Sensor	1 of 2



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Notes:

- 1. Please take Anti interference into consideration when designing driving circuit.
- 2. Driving voltage is suggested to be lower than 5Vp-p.
- 3. Maximum pressure endurance is 2.5MPa.

Revision History:

Version	Date (MM/DD/YY)	DWN	Statement	
	1/19/2013		Specifications	
A5	3/17/2015		Adjust specification format	

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ſ	<u>Part No.</u>	Rev	Title	Sheet No.
	US0014-001	A5	Ultrasonic Flow Sensor	2 of 2