

SensComp, Inc. 36704 Commerce Rd. Livonia, MI 48150 USA Telephone: (734) 953-4783 Fax: (734) 953-4518 www.senscomp.com

## Series 600 Environmental Grade Transducer

SensComp's Series 600 Environmental Grade Electrostatic Transducer is specifically intended for operation in air at ultrasonic frequencies. This transducer is identical to the Series 600 Instrument Grade Transducer except that the outer housing is made of 304 stainless steel for harsh environments.

#### **Features**

50 kHz Electrostatic Transducer
Beam Angle of 15° at -6 dB
Ranges from 6" to 35'
Excellent Receive Sensitivity
Better Suited for Harsh Environments
Stainless Steel Housing, Perforated Protective Cover.
Specifically Intended for Operation in Air at Ultrasonic
Frequencies

## Part No.

PID# 607281 – Series 600 Environmental Grade

Transducer (RoHS Compliant)

## **Benefits**

Able to Range from 6" to 35' Excellent Receive Sensitivity

## **Applications**

Level Measurement, Proximity Detection, Presence Detection, Robotics, Educational Products Operation in Outdoor Environments

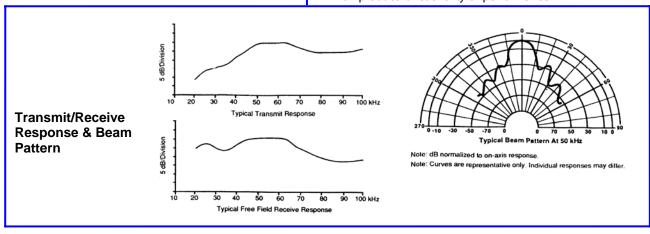
# **Specifications**

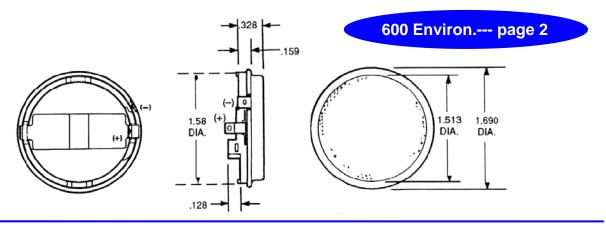


## **Description**

The Series 600 ultra sensitive transducers feature ranging capability from 2.5 cm to 15.2 m when used with SensComp drive electronics. They are ideally suited for demanding applications where the most sensitivity possible is the highest priority. These ultrasonic transducers are among the best available when detecting soft targets. They have a broad band frequency response.

Lines which may occasionally appear in foil have no effect on product functionality or performance.





# **Specifications**

Usable Frequency Range		Suggested DC Bias Voltage	200V
Transmitting	See Graph	Suggested AC Driving Voltage	200V peak
Receiving	See Graph	Combined Voltage	400V max
Beam Pattern	See Graph	Capacitance at 1 kHz (typical)	400–500 pf
Typical: 15° at -6dB		(at 150 VDC bias)	
Transmitting Sensitivity	110 dB min	Operating Temperature	40 to +85° C
at 50.0 kHz; 0dB re 20 µPa at 1 m	neter		(-40 to 185° F)
(300 VAC <sub>PP</sub> ; 150 VDC bias)		Storage Temperature	40 to 120° C
Receiving Sensitivity	42 dB min		(-40 to 250° F)
at 50.0 kHz; 0dB = 1 volt/Pa		Relative Humidity (non condensing)	5% - 95%
(150 VDC bias)		Dimension	
Distance Range	0.15 to 10.7 M	Thickness	0.46 inch
	(0.5 to 35 feet)	Diameter	1.69 inch
Resolution (± 1% over entire range)	± 3mm to 3m	Standard Finish	
	(± 0.12 to 10 ft)	Foil	Gold
Weight	8.2 gm (0.29 oz)	Housing	304 Stainless
			Steel

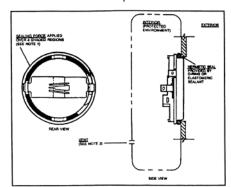
Specifications subject to change without notice

## **Environmental Characteristics & Exposures**

Note: The following tests were performed in an environmentally controlled test facility with the transducer housed in a custom designed test enclosure. The test enclosure protects the transducer sides and back from exposure to any foreign matter. The rear of the transducer is vented to atmosphere pressure.

After each test, the transducers were cleaned and dried as necessary. Measurements were then taken at room temperature.

•	Storage Temperature40 TO 120° C (-40 to 250 ° F) Salt Spray Exposure (96 hours)5% salt spray solution at 95 °
•	Shock and Vibration
•	Water Immersion (24 hours)(vent hole sealed)
•	Freeze/Thaw Cycle (4 cycles)Spray with water, drain, expose to -20° F (-30° C) for 20 minutes, allow to warm to room temperature.
•	Chemical Exposure



No claims are made for performance without an enclosure providing protection equal to or better than the test enclosure described above. Similarly, no claim is made for performance in any other environments or under any other condition than those controlled conditions described herein.

SUNSTAR实业集团是集研发、生产、工程、销售、代理经销 、技术咨询、信息服务等为一体的高科技企 业,是专业高科技电子产品生产厂家,是具有10多年历史的专业电子元器件供应商,是中国最早和最大的 仓储式连锁规模经营大型综合电子零部件代理分销商之一,是一家专业代理和分銷世界各大品牌IC芯片和 電子元器件的连锁经营綜合性国际公司。在香港、北京、深圳、上海、西安、成都等全国主要电子市场设 有直属分公司和产品展示展销窗口门市部专卖店及代理分销商,已在全国范围内建成强大统一的供货和代 理分销网络。 我们专业代理经销、开发生产电子元器件、集成电路、传感器、微波光电元器件、工控机 /DOC/DOM电子盘、专用电路、单片机开发、MCU/DSP/ARM/FPGA软件硬件、二极管、三极管、模块等, 是您可靠的一站式现货配套供应商、方案提供商、部件功能模块开发配套商。专业以现代信息产业(计算 机、通讯及传感器)三大支柱之一的传感器为主营业务,专业经营各类传感器的代理、销售生产、网络信 息、科技图书资料及配套产品设计、工程开发。我们的专业网站——中国传感器科技信息网(全球传感器 数据库) www.SENSOR-IC.COM 服务于全球高科技生产商及贸易商,为企业科技产品开发提供技术交流 平台。欢迎各厂商互通有无、交换信息、交换链接、发布寻求代理信息。欢迎国外高科技传感器、变送器、 执行器、自动控制产品厂商介绍产品到 中国,共同开拓市场。本网站是关于各种传感器-变送器-仪器仪表 及工业自动化大型专业网站,深入到工业控制、系统工程计 测计量、自动化、安防报警、消费电子等众多 领域,把最新的传感器-变送器-仪器仪表买卖信息,最新技术供求,最新采购商,行业动态,发展方向,最新 的技术应用和市场资讯及时的传递给广大科技开发、科学研究、产品设计人员。本网站已成功为石油、化 工、电力、医药、生物、航空、航天、国防、能源、冶金、电子、工业、农业、交通、汽车、矿山、煤炭、 纺织、信息、通信、IT、安防、环保、印刷、科研、气象、仪器仪表等领域从事科学研究、产品设计、开 发、生产制造的科技人员、管理人员、和采购人员提供满意服务。 我公司专业开发生产、代理、经销、 销售各种传感器、变送器、敏感元器件、开关、执行器、仪器仪表、自动化控制系统: 专门从事设计、生 产、销售各种传感器、变送器、各种测控仪表、热工仪表、现场控制器、计算机控制系统、数据采集系统、 各类环境监控系统、专用控制系统应用软件以及嵌入式系统开发及应用等工作。如热敏电阻、压敏电阻、 温度传感器、温度变送器、湿度传感器、 湿度变送器、气体传感器、 气体变送器、压力传感器、 压力变 送、称重传感器、物(液)位传感器、物(液)位变送器、流量传感器、流量变送器、电流(压)传感器、 溶氧传感器、霍尔传感器 、图像传感器、超声波传感器、位移传感器、速度传感器、加速度传感器、扭距 传感器、红外传感器、紫外传感器、 火焰传感器、激光传感器、振动传感器、轴角传感器、光电传感器、 接近传感器、干簧管传感器、继电器传感器、微型电泵、磁敏(阻)传感器 、压力开关、接近开关、光电 开关、色标传感器、光纤传感器、齿轮测速传感器、 时间继电器、计数器、计米器、温控仪、固态继电器、 调压模块、电磁铁、电压表、电流表等特殊传感器。 同时承接传感器应用电路、产品设计和自动化工程 项目。

欢迎索取免费详细资料、设计指南和光盘;产品凡多,未能尽录,欢迎来电查询。 更多产品请看本公司产品专用销售网站:

中国传感器科技信息网: http://www.sensor-ic.com/工控安防网: http://www.pc-ps.net/

电子元器件网: http://www.sunstare.com/微波光电产品网:HTTP://www.rfoe.net/

消费电子产品网://www.icasic.com/军工产品网:http://www.junpinic.com/

实业科技产品网://www.sunstars.cn/传感器销售热线:

电话: 0755-83607652 83376489 83376549 83370250 83370251

传真: 0755-83376182 (0) 13902971329 MSN: SUNS8888@hotmail.com

邮编: 518033 E-mail:szss20@163.com QQ: 195847376

技术支持: 0755-83394033 13501568376