

PC-6343 Pressure Sensor Die



- 0 to 10 kPa range (0.1bar or 1.5PSI) •
- Gage/differential pressure sensors •
- Relative pressure sensors

DESCRIPTION

The PC-6343 die is a piezoresistive pressure sensor designed for low pressure applications. This die combines bulk micromaching technology, implanted piezoresistors and electrochemical etch stop. This die is available in 0 to 10 kPa pressure ranges in both gage and differential configurations. The PC-6343 die sensors are offered in open bridge (two independent half bridges) configurations .

FEATURES

- Relative pressure sensors
- -40°C to +125°C Temperature Range
- $\pm 0.1\%$ Linearity
- Die Size: 2.60 x 2.60x1.03mm
- Low Cost, High Reliability

APPLICATIONS

- Process Control
- Respiratory
- HVAC
- Patient Monitoring

CHIP DIMENSIONS

PARAMETERS	TYP	MAX	UNIT
Die Length	2.60		mm
Die Width	2.60		mm
Die Height (with glass constraint)	1.03		mm
Pad Size	150x150		microns
Gage Hole Diameter	0.6		mm

PERFORMANCE SPECIFICATION

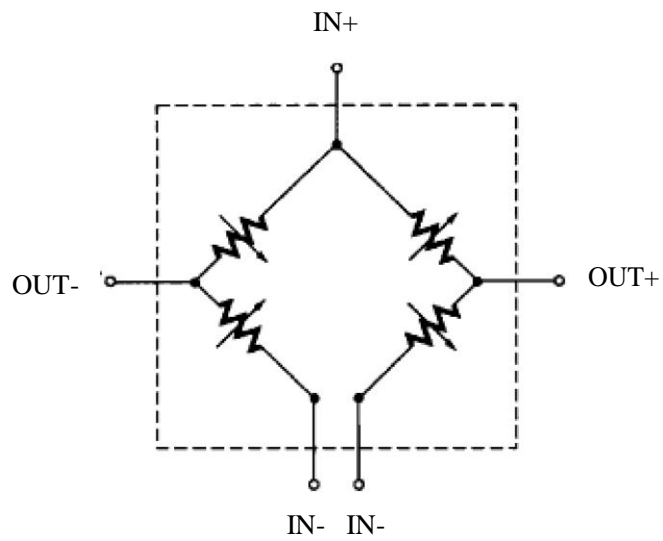
PARAMETER	VALUE	UNITS	NOTES
GENERAL			
Pressure Range	10	kPa	
Over Pressure	3x	FS	
Burst Pressure	5x	FS	
ENVIRONMENTAL			
Temperature Range			
Operating	-40 to +125	°C	
Storage	-55 to +150	°C	
MECHANICAL			
Media Compatibility	Clean, dry air and	noncorrosive gases	
ELECTRICAL @ 25°C, 1.0mA unless otherwise stated. Also see note 3			
Sensitivity	80±20	mV	
TC Sensitivity	-2300	ppm/°C	
Offset	±5	mV/V	
TC Offset	±0.01	%FSO/°C	
Bridge Resistance	15	kΩ	
TC Resistance	3600	ppm/°C	
Linearity Error	±0.1	%FSO	
Excitation	5	V	

NOTES:

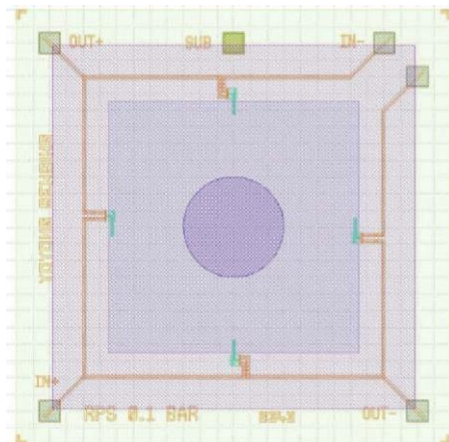
1. Best fit straight line.
2. Temperature Coefficient values over 0°C to 50°C with reference to 25°C.
3. Die performance will vary with packaging and assembly methods.

CONNECTIONS

SCHEMATIC DIAGRAM



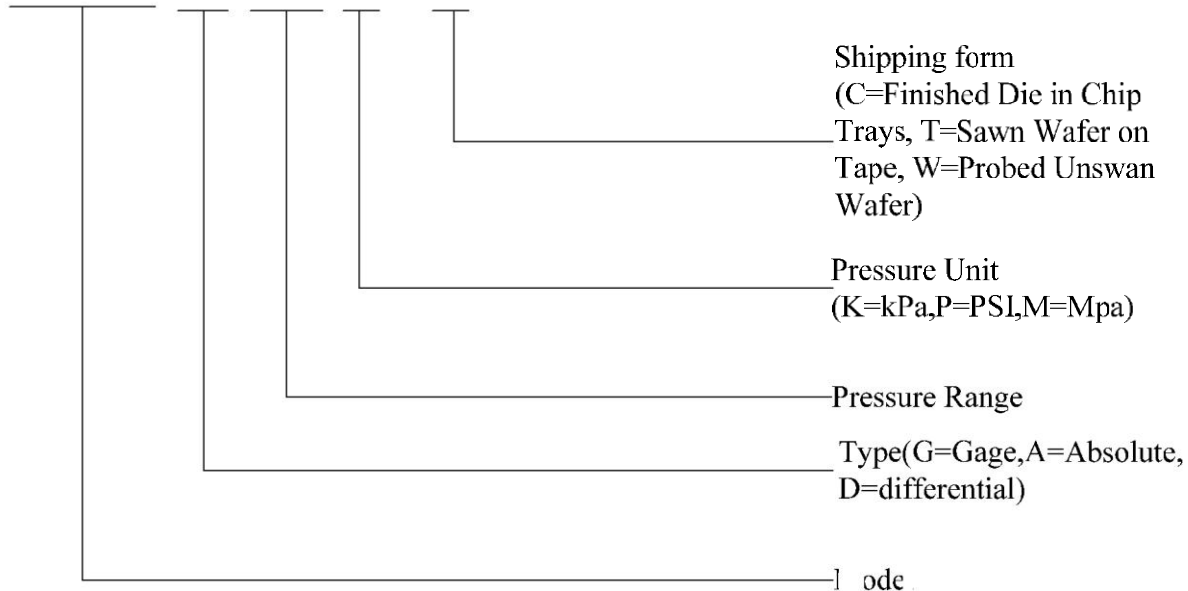
WIREBOND DIAGRAM



PC-6343 Pressure Sensor Die

ORDERING INFORMATION

P-6343G-010K- C



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Contact Information:

BAYSTAR ELECTRUMENT Co.LTD

Tel: 001-408-272-3669

www.baystar-inc.com

info@baystar-inc.com