

HSXA0100-YT
HSXF0100-YT
HSXC0100-YT

Absolute Pressure Sensor (0-1 BAR)

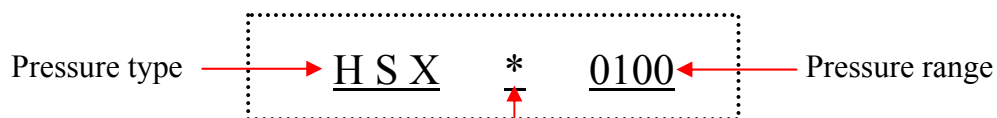


- 0 to 100kPa pressure range (1 bar or 15 PSI)
- Absolute pressure sensor
- high stability
- Miniature surface mount
- RoHS-compatible & Pb-free
- Provide the other gage pressure range sensor

DESCRIPTION

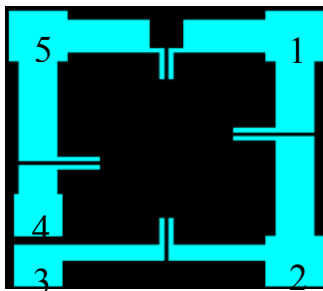
The series sensors are produced under the combination of micro machining technology used in IC and MEMS technology. These absolute sensors can be soldered on PCB directly, which reduces cost without sacrificing steadiness. The sensors also can be packed into other forms which better features and wider measuring range will be achieved. By integrating amplifier, zero and sensitivity compensation circuits, ADC and MCU into the same board, the intelligent sensor modules simplify the design work greatly in the most of applications concerning pressure measurements. HSX series sensors are widely used in Altitude measurement, weather forecast, tire pressure monitoring, industrial automation and so on.

Part number System



- A: Absolute pressure sensor DIE
- F: mounted on FR4 carrier
- C: mounted on ceramic carrier

WAFER ELECTRICAL CONNECTIONS



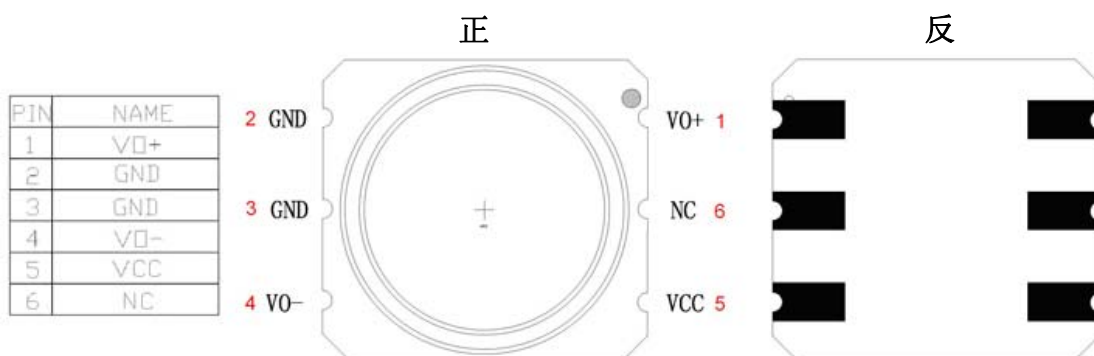
Pad	Connection
1	Vc
2	Vout+
3,4	Vd
5	Vout-

Chip dimensions: 1.6×1.6×0.9mm

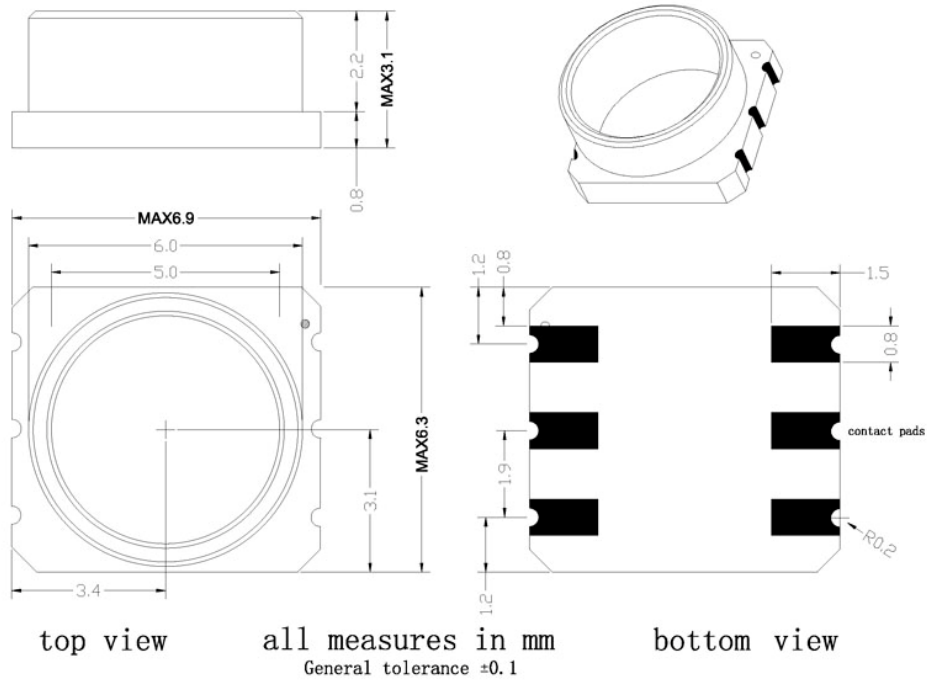
Characteristics

Measurement media	Dry technical gases	
Type	AE2	
Output signal	Not Temperature	
Pressure from	Front side	
Dimensions		
Chip size	(mm ²)	1.6×1.6
Total height	(mm)	0.9
Glass thickness	(mm)	0.5
Hole diameter	(mm)	
Maximum ratings		
Storage temperature	T _{st} (C°)	-40--150
Operating temperature	T _a (C°)	-30--135
Supply voltage (max.)	V _{DD} (V)	10
Temperature characteristics		
V_{DD}=5V		
Temperature coefficients of the bridge resistance	(%/C°)	0.25---0.35
Temperature coefficients of the Sensitivity	(%/C°)	- 0.25--- - 0.15
Temperature coefficients of the Zero	(%/C°)	- 0.10---+0.10
Characteristics T_a =25C° V_{DD}=5V		
Bridge resistance (min/max)R _s	(KΩ)	4.5—5.5
Offset voltage (min/max)V ₀	(MV)	-25---+25
Nonlinearity (typ)N _L	(%FS)	±0.2
Output span (typ)V _{SP}	(MV)	80-----130

Pin Configuration(SMD)

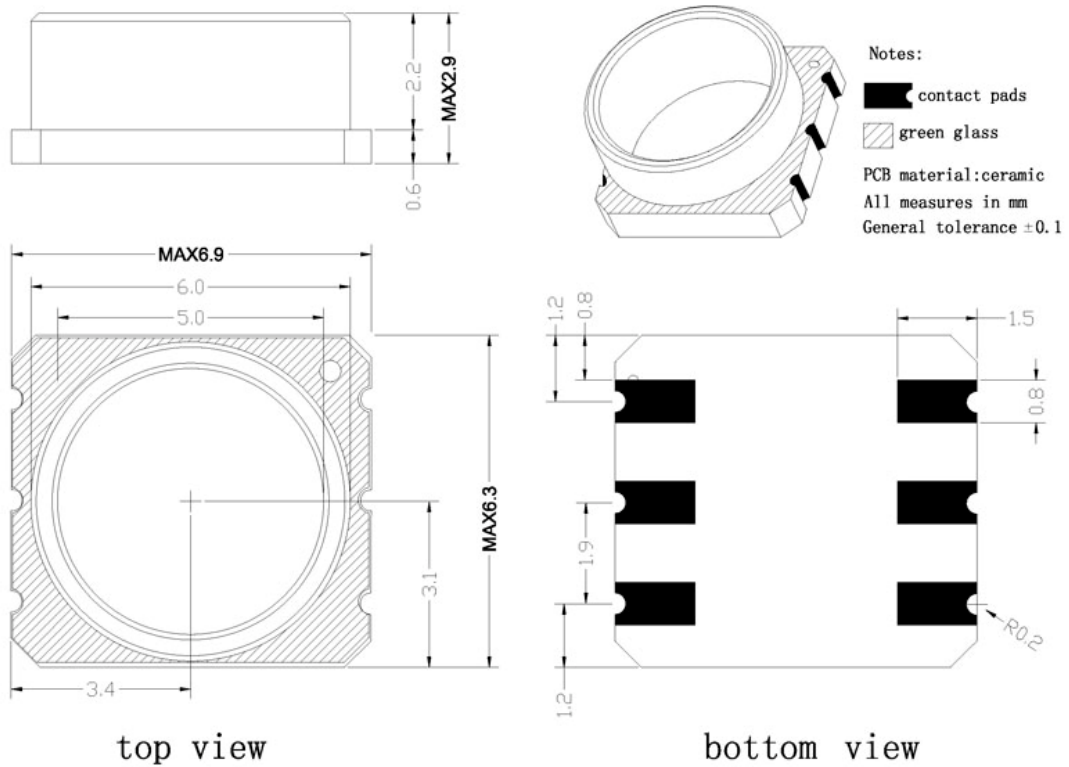


FR4 Package Outlines



Ceremic Package Outlines

HOPE RF



ORDERING INFORMATION

Product Code	Description
HSXA0100	100kpa Absolute Pressure Sensor Die
HSXF0100	100kpa SMD pressure sensor mounted on FR4 Carrier
HSXC0100	100kpa SMD pressure sensor mounted on ceramic Carrier

HOPE RF

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