

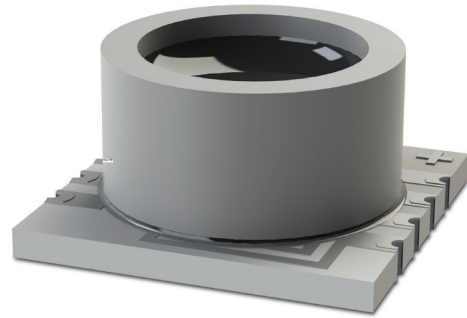


The SMD Series is a surface-mountable pressure monitoring device suitable for low to medium pressure applications.

COMPANY: Merit Sensor is a leader in piezoresistive pressure sensing and partners with clients to create high performing solutions for a variety of applications and industries.

SENTIUM: Merit Sensor products incorporate a proprietary Sentium® technology developed to provide a best-in-class operating temperature range (-40°C to 85°C) and superior stability.

TECHNOLOGY: Merit Sensor utilizes a piezoresistive Wheatstone bridge in a design that anodically bonds glass to a chemically etched silicon diaphragm. All products are RoHS compliant.



CAPABILITIES: Merit Sensor designs, engineers, fabricates, dices, assembles and tests all products from a state-of-the-art facility near Salt Lake City, Utah.

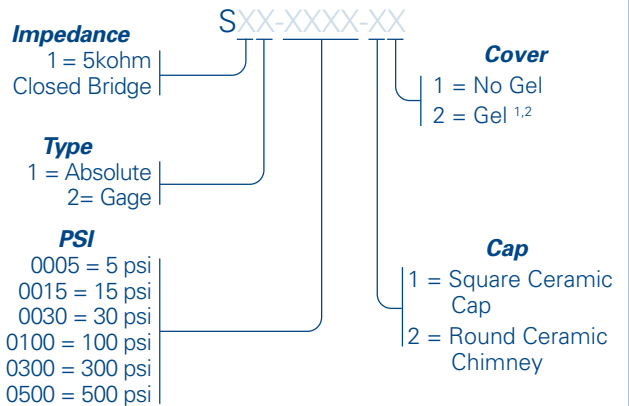
FEATURES

Table with 2 columns: Feature Name and Description. Rows include Range, Pressure, Media, Packaging, and Flexibility.

BENEFITS

Table with 2 columns: Benefit Name and Description. Rows include Performance, Cost, Security, Speed, and Service.

SMD Series Part Number Configurator



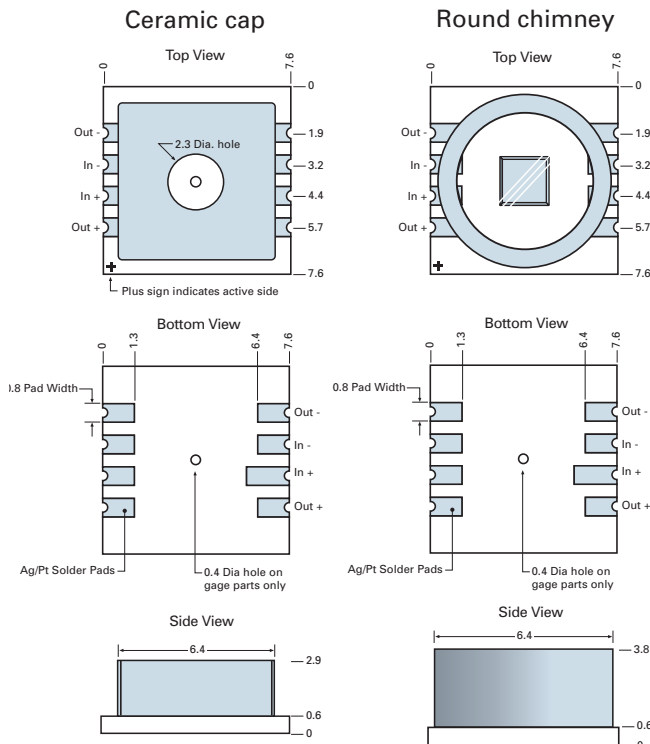
Example: S11-0015-11 offers 5kohm Impedance, Closed Bridge, Absolute Constraint, 15 psi, Square Ceramic Cap, No Gel

1 Not available with cap. 2 Not available above 100 psi.

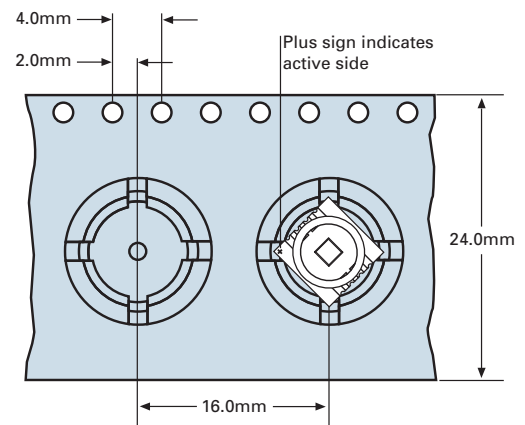
## SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Units	Notes
<b>Electrical &amp; Environmental</b>					
Excitation (In)		5	15	V	Maximum: 3 mA
Impedance	4000	5000	6000	$\Omega$	
Operating Temperature	-40		85	$^{\circ}\text{C}$	Sentium® technology
Storage Temperature	-55		160	$^{\circ}\text{C}$	
<b>Performance</b>					
Offset	-10	0	10	mV/V	Zero pressure; gage only; @25°C
Non-linearity	-0.2	0	0.2	% FSO	Best Fit Straight Line; @25°C
Pressure Hysteresis	-0.1	0	0.1	% FSO	@25°C
Temp Coeff – Zero	-25	0	25	$\mu\text{V/V}/^{\circ}\text{C}$	-40°C to 85°C
Temp Coeff – Resistance	2300	2800	3300	PPM/ $^{\circ}\text{C}$	-40°C to 85°C
Temp Coeff – Sensitivity	-1500	-2200	-2500	PPM/ $^{\circ}\text{C}$	-40°C to 85°C
Thermal Hysteresis	-0.2	0	0.2	% FSO	Zero pressure
Burst Pressure	2X				Room Temperature
<b>Full-Scale Output (@ 5 volts Excitation)</b>					
5 psi (0.34 bar; 34.5 KPa)	60	75	90	mV	Closed Bridge only
15 psi (1 bar; 103 KPa)	125	150	175	mV	
30 psi (2.1 bar; 207 KPa)	120	150	180	mV	
100 psi (6.9 bar; 689 KPa)	120	150	180	mV	
300 psi (20.7 bar; 2068 KPa)	120	150	180	mV	
500 psi (34.5 bar; 3447 KPa)	140	175	210	mV	

## DIMENSIONS AND ELECTRICAL (millimeters)



## PACKAGING AND SHIPPING (millimeters)



Absolute and Gage available