

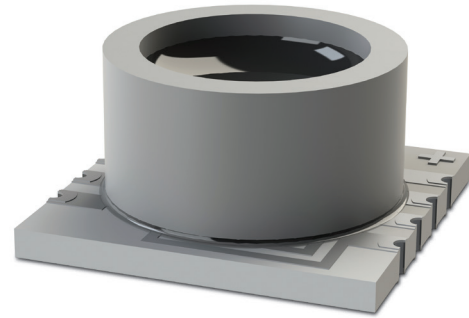
The MS Series is a surface-mountable pressure monitoring device suitable for low to medium pressure applications.

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 products from a state-of-the-art facility near Salt Lake City, Utah.



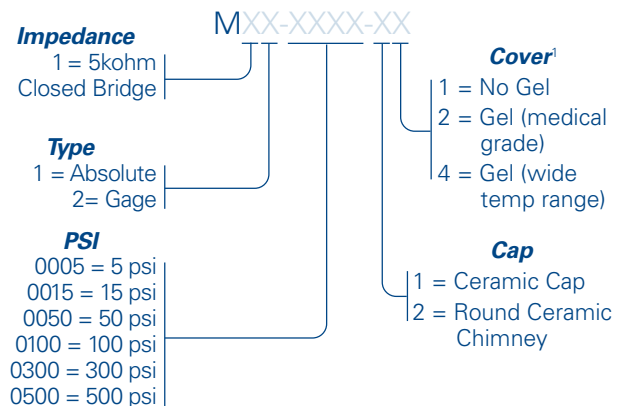
FEATURES

Range	5 to 500 psi (0.34 to 34.5 bar; 34.5 to 3,447 KPa)
Pressure	Absolute, gage, differential, vacuum
Media	Clean, dry air and non-corrosive gases (No Gel) Liquids compatible with silicone (Gel option)
Packaging	Tape & Reel
Flexibility	Sensitivity, bridge, type, etc.

BENEFITS

Performance	Enjoy best-in-class performance due to Merit's proprietary Sentium technology.
Cost	Save money over time with high-performing MEMS
Security	Feel confident doing business with an experienced company backed by a solid parent company (NASDAQ: MMSI)
Speed	Get to market quickly with creative and flexible solutions.
Service	Experience prompt, personal, and professional support.

MS Series Part Number Configurator



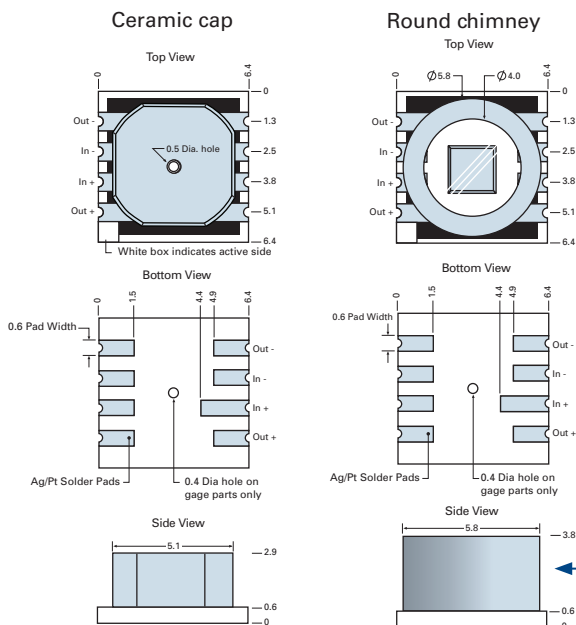
Example: M11-0015-11 offers 5kohm Impedance, Closed Bridge, Absolute Constraint, 15 psi, Ceramic Cap, No Gel

¹ Gel only available with round chimney. Using gel in air/gases at pressures above 100psi should be validated in customer application due to risk of permeation (depending on time at pressure)

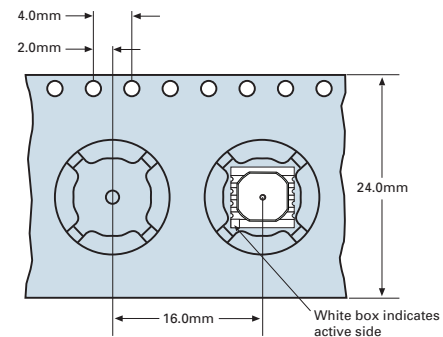
SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Units	Notes
Electrical & Environmental					
Excitation (In)		5	15	V	Maximum: 3 mA
Impedance	4000	5000	6000	Ω	
Operating Temperature	-40		85	$^{\circ}\text{C}$	
Storage Temperature	-55		160	$^{\circ}\text{C}$	
Mechanical					
Chimney Shear – Room	20.7	39.9		kgf	See chimney drawing below
Chimney Shear – Hot	8.2	10.2		kgf	125 $^{\circ}\text{C}$
Performance					
Offset	-10	0	10	mV/V	Zero pressure; gage only; @25 $^{\circ}\text{C}$
Non-linearity	-0.2	0	0.2	% FSO	Best Fit Straight Line; @25 $^{\circ}\text{C}$
Pressure Hysteresis	-0.1	0	0.1	% FSO	@25 $^{\circ}\text{C}$
Temp Coeff – Zero	-25	0	25	$\mu\text{V/V}/^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$
Temp Coeff – Resistance	2300	2800	3300	PPM/ $^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$
Temp Coeff – Sensitivity	-1500	-2200	-2500	PPM/ $^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$
Thermal Hysteresis	-0.1	0	0.1	% FSO	Zero pressure
Burst Pressure	2X			FS pressure	Room Temperature
Lifetime Drift	-0.5%		0.5%	% FSO	1000 HRS. @ 150 $^{\circ}\text{C}$, 5V supply, without gel, without solder reflow
Full-Scale Output (@ 5 volts excitation)					
5 psi (0.34 bar; 34.5 KPa)	100	133	166	mV	Closed bridge only
15 psi (1 bar; 103 KPa)	60	75	90	mV	
50 psi (3.4 bar; 345 KPa)	100	125	150	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