



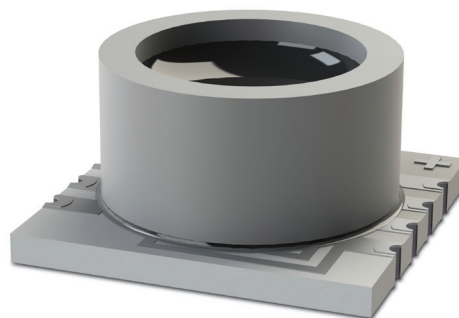
The MS Series is a surface-mountable pressure monitoring device suitable for low to medium pressure applications.

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 Sentiium® 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.



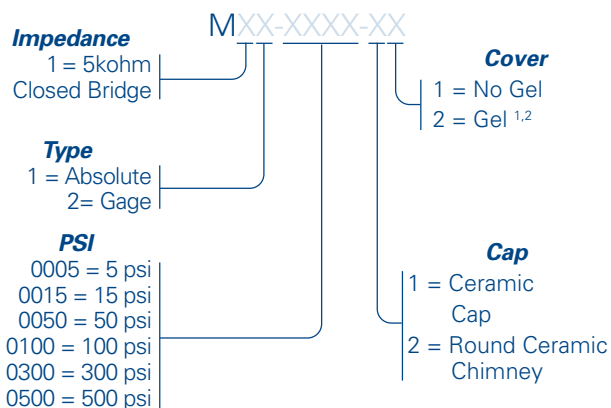
FEATURES

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 Sentiium 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

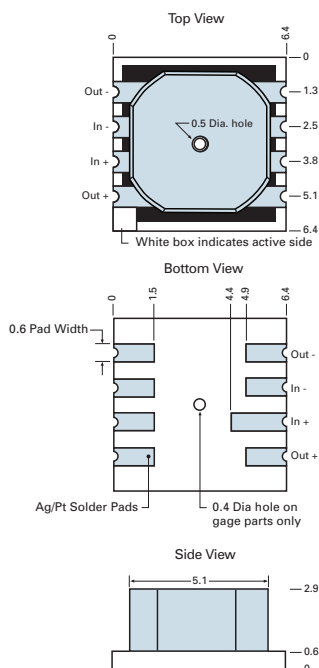
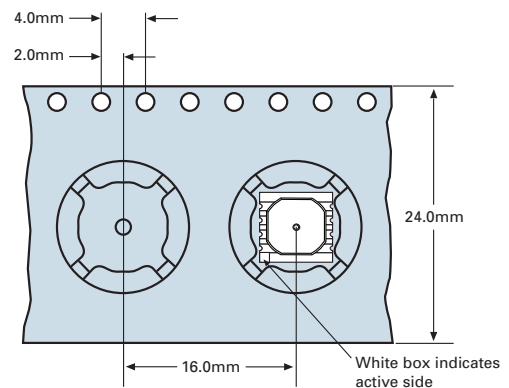
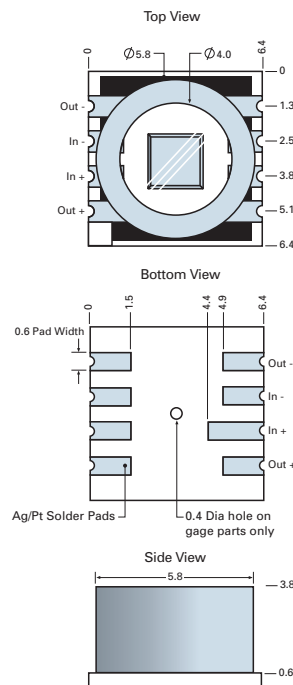


Example: M11-0015-11 offers 5kohm Impedance, Closed Bridge, Absolute Constraint, 15 psi, Ceramic Cap, No Gel

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

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	°C	Sentium® technology
Storage Temperature	-55		160	°C	
Performance					
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/°C	-40°C to 85°C
Temp Coeff – Sensitivity	-1500	-2200	-2500	PPM/°C	-40°C to 85°C
Thermal Hysteresis	-0.1	0	0.1	% FSO	Zero pressure
Burst Pressure	2X				Room Temperature
Full-Scale Output (@ 5 volts excitation)					
5 psi (0.34 bar; 34.5 KPa)	75	100	125	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)
Ceramic cap

Round chimney


Absolute and Gage available

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Merit Sensor:

<u>M11-0500-11</u>	<u>M12-0015-22</u>	<u>M11-0100-11</u>	<u>M12-0005-21</u>	<u>M11-0015-22</u>	<u>M12-0015-11</u>	<u>M11-0015-11</u>	<u>M12-0100-11</u>
<u>M11-0050-21</u>	<u>M12-0500-11</u>	<u>M11-0050-22</u>	<u>M12-0050-22</u>	<u>M12-0050-21</u>	<u>M11-0500-21</u>	<u>M11-0100-21</u>	<u>M11-0100-22</u>
<u>M12-0050-11</u>	<u>M12-0500-21</u>	<u>M12-0100-22</u>	<u>M11-0015-21</u>	<u>M12-0100-21</u>	<u>M11-0050-11</u>	<u>M11-0300-21</u>	<u>M12-0300-21</u>
<u>M11-0300-11</u>	<u>M12-0300-11</u>	<u>M12-0015-21</u>					