

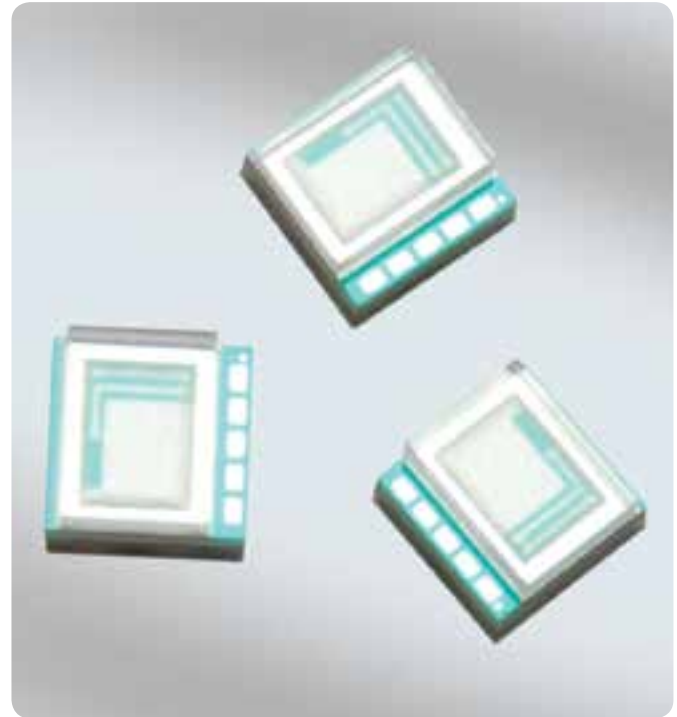
The HM Series is ideal for high-volume, low and medium pressure, harsh-media applications.

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 150°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.



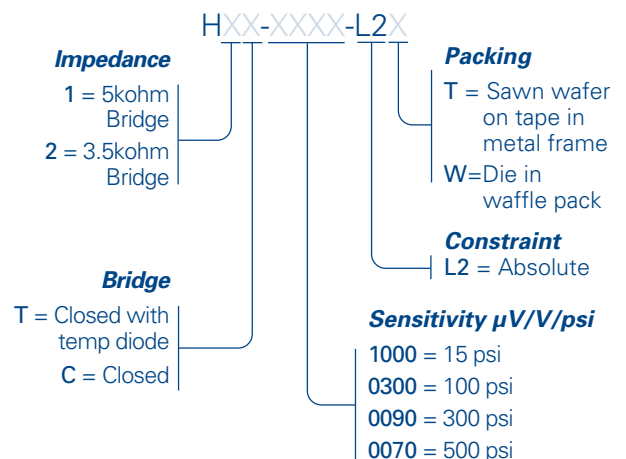
FEATURES

Range	15 to 500 psi (1 to 34.5 bar; 103 to 3,447 KPa)
Type	Absolute; pressurized from cavity side
Media	Air, gases and liquids that are compatible with silicon and glass
Shipping	Wafers on tape, waffle pack
Flexibility	Sensitivity, resistance, bridge, constraint, etc.

BENEFITS

Performance	Enjoy best-in-class performance due to Merit's proprietary Sentiium technology
Cost	Save money over time with high-performing die
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

HM Series Part Number Configurator



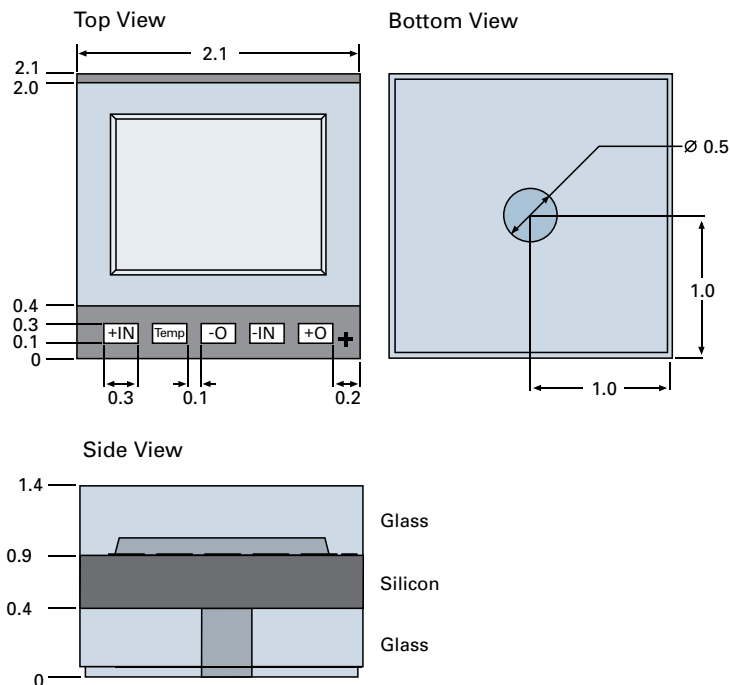
HM Series Standard Part Numbers

H1T-0300-L2T	H1C-0090-L2T	H1C-1000-L2T
H1C-0300-L2T	H1T-0070-L2T	H1T-1000-L2T
H1T-0090-L2T	H1C-0070-L2T	

SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Units	Notes
Electrical & Environmental					
Excitation (In)		5	15	V	Maximum: 3 mA
Impedance	4000	5000	6000	Ω	Optional: 3,500 +/- 500
Operating Temperature	-40		150	$^{\circ}\text{C}$	Sentium [®] technology
Storage Temperature	-55		160	$^{\circ}\text{C}$	
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	$\mu\text{V}/\text{V}/^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$
Temp Coeff – Resistance	2300	2800	3300	PPM/ $^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$
Temp Coeff – Sensitivity	-1500	-2200	-2500	PPM/ $^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$
$U_{\text{diode}} @ I_S = 40\mu\text{A}$	460	530	600	mV	
TC of U_{diode}	-2.5	-2.2	-2.0	mV/ $^{\circ}\text{C}$	
Long-Term Stability	-0.2	0	0.2	% FSO	
Burst Pressure	5X				Full scale pressure
Burst Pressure (500 psi part)	1500			psi	
Full-Scale Output (@ 5 volts excitation)					
15 psi (1 bar; 103 KPa)	60	75	90	mV	Other outputs available upon request
100 psi (6.9 bar; 689.5 KPa)	120	150	180	mV	
300 psi (20.7 bar; 2,068 KPa)	110	135	160	mV	
500 psi (34.5 bar; 3,447 KPa)	140	175	210	mV	

DIMENSIONS (millimeters, post cut)



ELECTRICAL

