



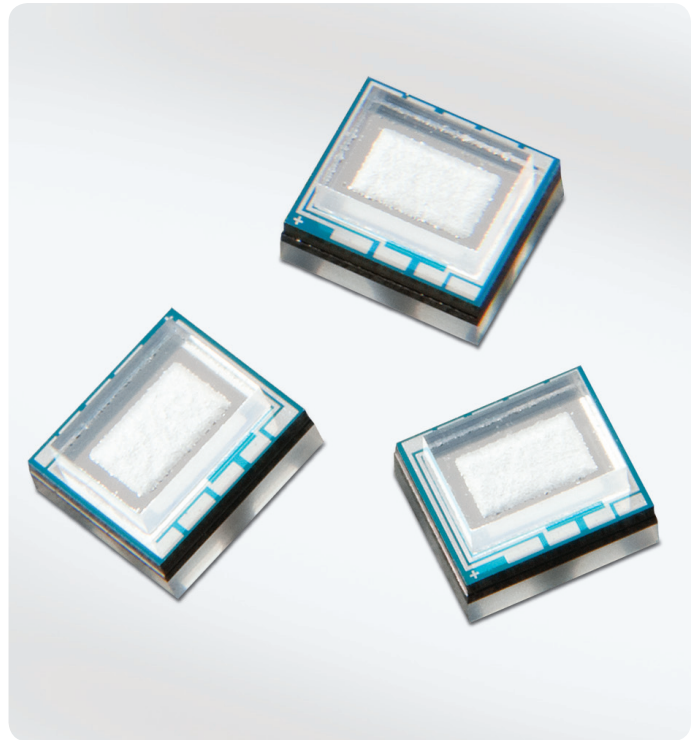
The **HM Series** is ideal for high-volume, low and medium pressure, harsh-media OEM applications.

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, which was 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, tests, sells and services die and packaged products from a state-of-the-art facility near Salt Lake City, Utah.



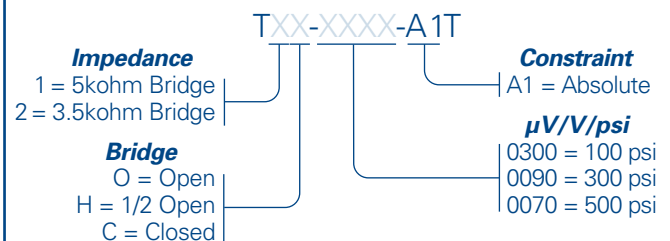
FEATURES

Range	100 to 500 psi (7 to 34.5 bar; 700 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.
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



Example: T10-0300-A1T offers 5kohm Impedance, Open Bridge, 100 psi and Absolute Constraint

Note: "T" in part number = sawn wafer on tape in metal frame

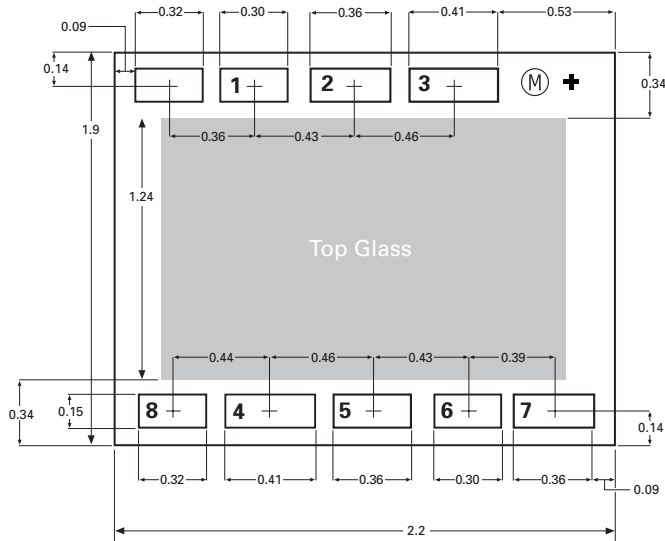
HM Series Standard Part Numbers

T10-0300-A1T	T1C-0070-A1T	T2C-0090-A1T
T10-0090-A1T	T20-0300-A1T	T2C-0070-A1T
T10-0070-A1T	T20-0090-A1T	
T1H-0300-A1T	T20-0070-A1T	
T1H-0090-A1T	T2H-0300-A1T	
T1H-0070-A1T	T2H-0090-A1T	
T1C-0300-A1T	T2H-0070-A1T	
T1C-0090-A1T	T2C-0300-A1T	

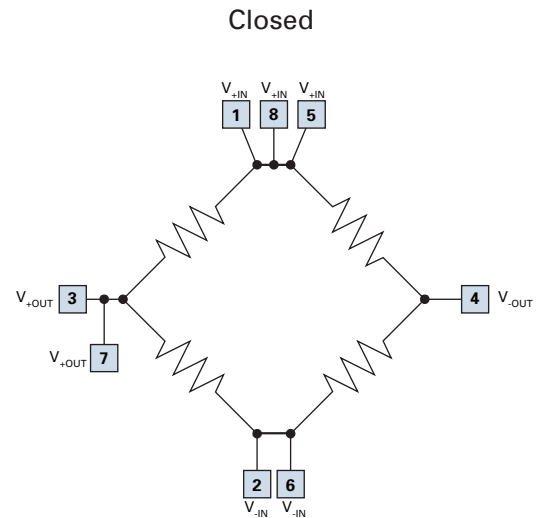
SPECIFICATIONS

Parameter	Minimum	Typical	Maximum	Units	Notes
Electrical & Environmental					
Excitation		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 $^{\circ}\text{C}$
Long-Term Stability	-0.2	0	0.2	% FSO	
Burst Pressure	5X				Full scale pressure
Full-Scale Output (@ 5 volts)					
100 psi (6.9 bar; 689 KPa)	120	150	180	mV	Other outputs available upon request
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



Standard Bond Pad Metallization = Aluminum

