

## ABSOLUTE MAXIMUM RATINGS

Parameter	Conditions	Min	Max	Unit	Notes
Supply Voltage	T <sub>A</sub> = 25 °C	2.7	5.5	V	
Output Current	T <sub>A</sub> = 25°C		3	mA	
Storage Temperature		-40	+125	°C	
Humidity	T <sub>A</sub> = 25°C		95	%RH	Non Condensing
Overpressure	T <sub>A</sub> = 25 °C, both Ports	Not to Exceed 300		psi	
Burst Pressure	T <sub>A</sub> = 25 °C, Port 1			psi	See Table 1
ESD	HBM	-4	+4	kV	EN 61000-4-2
Solder Temperature		250°C, 5 sec max.			

**TABLE 1: BURST PRESSURE BY RANGE AND PACKAGE STYLE**

Style	Port	002	004	005	010	020	030	Unit
DS,MM	Port 1	10	10	10	10	10	20	PSI
	Port 2	10	10	10	10	10	20	PSI
SS,TP	Port 1		10	10	10	10	20	PSI

## ENVIRONMENTAL SPECIFICATIONS

Parameter	Conditions
Mechanical Shock	Mil Spec 202F, Method 213B, Condition C, 3 Drops
Mechanical Vibration	Mil Spec 202F, Method 214A, Condition 1E, 1Hr Each Axis
Thermal Shock	100 Cycles over Storage Temperature, 30 minute dwell
Life	1 Million FS Cycles
MTTF	>10Yrs, 70 °C, 1.188 Million Pressure Cycles, 120%FS Pressure

## PERFORMANCE SPECIFICATIONS

Supply Voltage<sup>1</sup>: 5.0V or 3.3 V<sub>DC</sub>

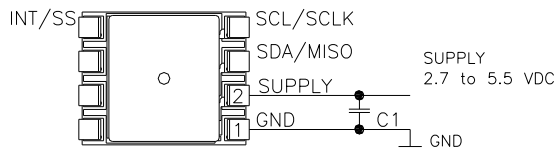
Reference Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Output	51E 1EB		3AE0 3EB	Count Hex	1,2,3
Span	31EA 3852	3333 3998	347A 3AE0	%Span	1,2,3
Pressure Accuracy	-0.25		0.25	%Span	2
Total Error Band (TEB)	-1.0		1.0	%Span	3,7
TEB (4inH <sub>2</sub> O and Below)	-2.0		2.0	%Span	3,7
Temperature Accuracy		1.5		°C	4
Supply Current		3		mA	7
Load Resistance (R <sub>L</sub> )	10			kΩ	
Long Term stability (Offset & Span)		±0.5		%Span	
Compensated Temperature	0		+60	°C	5
Operating Temperature	-10		+85	°C	
Output Pressure Resolution			14	bits	
Output Temperature Resolution	8		11	bits	
Update Time		0.5		ms	6
Start Time to Data Ready			8.4	ms	6
Weight			3	grams	
Media	Non-Corrosive Dry Gases Compatible with Ceramic, Silicon, Borosilicate Glass, RTV, Gold, Aluminum and Epoxy. See "Wetted Material by Port Designation" chart below.				

### Notes

- Proper operation requires an external capacitor placed as shown in Connection Diagram. Output is not ratiometric to supply voltage.
- The maximum deviation from a best fit straight line (BFSL) fitted to the output measured over the pressure range at 25C. Includes all errors due to pressure non linearity, hysteresis, and non-repeatability.
- Total pressure error band includes all accuracy errors, thermal errors over the compensated temperature range and span and offset calibration tolerances. For ideal sensor output with respect to input pressure and temperature, reference Transfer Function charts below. TEB values are valid only at the calibrated supply voltage.
- The deviation from a best fit straight line (BFSL) fitted to the output measured over the compensated temperature range.
- For errors beyond the compensated temperature range, see Extended Temperature Multiplier chart below.
- Start time to data ready is the time to get valid data after POR (power on reset). The time to get subsequent valid data is then specified by the update time specification.
- This product can be configured for custom OEM requirements, contact factory for lower power consumption or higher accuracy.

## CONNECTION DIAGRAM



### Notes

- Place 100nF capacitor between Supply and GND to within 2 cm of sensor.