



13 AND 43

1psi

SPECIFICATIONS

- PC Board Mountable Pressure Sensor
- 0-100 mV Output
- Current Excitation
- Gage Pressure
- Temperature Compensated

The 13 and 43 are temperature compensated, piezoresistive silicon pressure sensors packaged in a TO-8 configuration. It provides excellent performance and long-term stability.

Integral temperature compensation is provided over a range of 0-50°C using laser-trimmed resistors. An additional laser-trimmed resistor is included to normalize pressure sensitivity variations by programming the gain of an external differential amplifier. This provides sensitivity interchangeability of \pm 1%.

Please refer to the 13 and 43 standard datasheets for information on products with operating pressures greater than 1 psi.

FEATURES

- TO-8 Package
- 0°C to 50°C Compensated
- Temperature Range
- ±0.3% Non-Linearity
- 1.0% Interchangeable Span
- (provided by gain set resistor)
- Solid State Reliability

APPLICATIONS

- Medical Instruments
- Process Control
- Factory Automation
- Leak Detection
- Level Detection

STANDARD RANGES

Range	psig
0 to 1	•

PERFORMANCE SPECIFICATIONS

Supply Current: 1.5mA

Ambient Temperature: 25°C (unless otherwise specified)

PRESSURE RANGE 0 – 1 psi							
PARAMETERS	MIN	ТҮР	MAX	UNITS	NOTES		
Span	65	100	150	mV	1		
Zero Pressure Output	-2		2	mV			
Pressure Non Linearity	-0.3	±0.2	0.3	%Span	2		
Pressure Hysteresis	-0.05	±0.01	0.05	%Span			
Input & Output Resistance	2500	4400	6000	Ω			
Temperature Error – Span	-1.0	±0.5	1.0	%Span	3		
Temperature Error – Zero	-1.0	±0.5	1.0	%Span	3		
Thermal Hysteresis – Zero		±0.1		%Span	3		
Supply Current		1.5	2.0	mA			
Response Time (10% to 90%)		1.0		mS	4		
Output Noise (10Hz to 1kHz)		1.0		μV p-p			
Insulation Resistance (50 Vdc)	50			MΩ	5		
Long Term Stability (Offset & Span)		±0.2		%Span	6		
Pressure Overload			10	psi			
Compensated Temperature	0		50	°C			
Operating Temperature	-40		+125	°C			
Storage Temperature	-50		+150	°C			
Weight			3	grams			
Solder Temperature	250ºC Max 5 Se	ec.					
Media	Non-Corrosive Dry Gases Compatible with Silicon, Pyrex,						

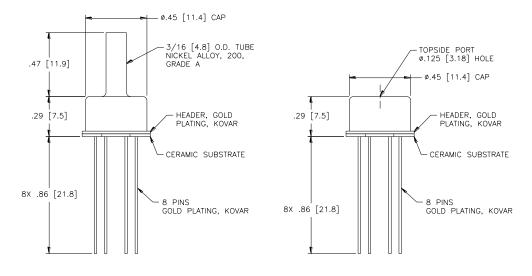
RTV, Gold, Nickel, and Aluminum

Notes

- 1. Ratiometric to supply current.
- 2. Best fit straight line.
- 3. Maximum temperature error between 0°C and 50°C with respect to 25°C.
- 4. For a zero-to-full scale pressure step change.
- 5. Minimum distance between case and pins.
- 6. Long term stability over a one year period with constant current and temperature.

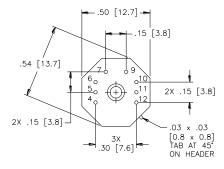
DIMENSIONS

DIMENSIONS ARE IN INCHES [mm]

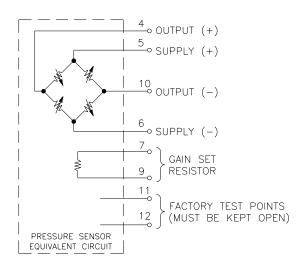


MODEL 13

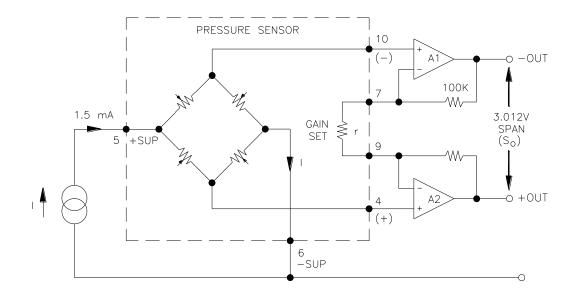
MODEL 43



CONNECTIONS

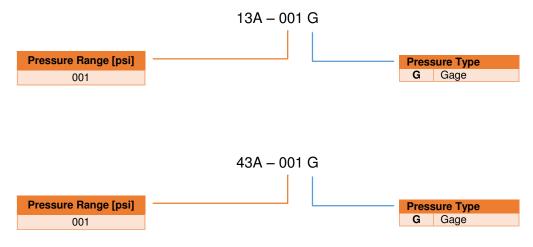


APPLICATION SCHEMATIC



APPLICATION SCHEMATIC

ORDERING INFORMATION



NORTH AMERICA

Measurement Specialties, Inc., a TE Connectivity Company Tel: 800-522-6752 customercare.frmt@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

Measurement Specialties (Europe), Ltd.,

a TE Connectivity Company

customercare.bevx@te.com

Tel: 800-440-5100

EUROPE

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.



ASIA

Measurement Specialties (China), Ltd., a TE Connectivity Company Tel: 0400-820-6015 <u>mailto:customercare.shzn@te.com</u>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Board Mount Pressure Sensors category:

Click to view products by TE Connectivity manufacturer:

Other Similar products are found below :

6407-249V-17343P 6407-250V-09273P 80527-25.0H2-05 80541-B00000150-01 80541-B00000200-05 80554-00700100-05 80568-00300050-01 93.631.4253.0 93.731.4353.0 93.932.4553.0 136PC150G2 136PC15A1 142PC95AW71 142PC05DW70 15PSI-G-4V 1805-01A-L0N-B 26PCBKT 26PCCFA6D26 26PCCFS2G 26PCCVA6D 93.632.7353.0 93.731.3653.0 93.931.4853.0 93.932.4853.0 SCDA120-XSC05DC 185PC30DH 20INCH-G-MV-MINI 26PCAFJ3G 26PCCEP5G24 26PCDFA3G 26PCJEU5G19 ASCX15AN-90 TSCSAAN001PDUCV DCAL401DN DCAL401GN XZ202798SSC XZ203676HSC 6407-249V-09343P 6407-250V-17343P SP370-25-116-0 81794-B00001200-01 HSCDLNN100PGAA5 82681-B00000100-01 81618-B0000040-05 SSCDJNN015PAAA5 TSCDLNN100MDUCV TSCSAAN100PDUCV NBPDANN015PGUNV NBPLLNS150PGUNV 142PC100D