

Pressure Sensor Characteristics Maximum Ratings

Supply Voltage, V_s	+4.5 to +5.5 Vdc
Common-mode pressure	10 psig
Lead Temperature (soldering 2-4 sec.)	250°C

Environmental Specifications

Temperature Ranges	
Compensated	5 to 50° C
Operating	-25 to 85° C
Storage	-40 to 125° C
Humidity Limits	0 to 95% RH (non condensing)

Standard Pressure Ranges

Part Number	Operating Pressure	Nominal Span	Proof Pressure	Burst Pressure
0.5 INCH-Dx-4V-MINI	± 0.5 inH2O	4 V	100 inH2O	200 inH2O
1 INCH-Dx-4V-MINI	± 1 inH2O	4 V	100 inH2O	200 inH2O
1 INCH-G-4V-MINI	0 - 1 inH2O	4 V	100 inH2O	200 inH2O
5 INCH-Dx-4V-MINI	± 5 inH2O	4 V	200 inH2O	300 inH2O
5 INCH-G-4V-MINI	0 - 5 inH2O	4 V	200 inH2O	300 inH2O
10 INCH-Dx-4V-MINI	± 10 inH2O	4 V	200 inH2O	300 inH2O
10 INCH-G-4V-MINI	0 - 10 inH2O	4 V	200 inH2O	300 inH2O
20 INCH-Dx-4V-MINI	± 20 inH2O	4 V	300 inH2O	500 inH2O
20 INCH-G-4V-MINI	0 - 20 inH2O	4 V	300 inH2O	500 inH2O
30 INCH-Dx-4V-MINI	± 30 inH2O	4 V	500 inH2O	800 inH2O
30 INCH-G-4V-MINI	0 - 30 inH2O	4 V	500 inH2O	800 inH2O

For differential pressure D1 is the package with two pressure ports the same side, D2 has two ports the opposite sides.

Performance Characteristics for 0.5 INCH-Dx-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	± 0.5	-	inH2O
Output Span, note 5	± 1.90	± 2.0	± 2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	± 120	mV
Offset Warm-up Shift, note 3	-	± 10	-	mV
Offset Position Sensitivity ($\pm 1g$)	-	± 5	-	mV
Offset Long Term Drift (one year)	-	± 10	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	± 2	%FSS

Performance Characteristics for 1 INCH-Dx-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	±1.0	-	inH2O
Output Span, note 5	±1.90	±2.0	±2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±60	mV
Offset Warm-up Shift, note 3	-	±10	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±10	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±2	%FSS

Performance Characteristics for 1 INCH-G-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, gage pressure	-	1.0	-	inH2O
Output Span, note 5	3.90	4.0	4.10	V
Offset Voltage @ zero pressure	0.15	0.25	0.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±60	mV
Offset Warm-up Shift, note 3	-	±10	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±10	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±2	%FSS

Performance Characteristics for 5 INCH-Dx-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	±5.0	-	inH2O
Output Span, note 5	±1.90	±2.0	±2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±40	mV
Offset Warm-up Shift, note 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±1	%FSS

Performance Characteristics for: 5 INCH-G-4V-MINI

Parameter, NOTE 1	Minimum	Nominal	Maximum	Units
Operating Range, gage pressure	-	5.0	-	inH2O
Output Span, NOTE 5	3.90	4.0	4.10	V
Offset Voltage @ zero pressure	0.15	0.25	0.35	V
Offset Temperature Shift (5°C-50°C), NOTE 2	-	-	±40	mV
Offset Warm-up Shift, NOTE 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, NOTE 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), NOTE 2	-	-	±1	%FSS

Performance Characteristics for: 10 INCH-Dx-4V-MINI

Parameter, NOTE 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	±10.0	-	inH2O
Output Span, NOTE 5	±1.90	±2.0	±2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), NOTE 2	-	-	±20	mV
Offset Warm-up Shift, NOTE 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, NOTE 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), NOTE 2	-	-	±1	%FSS

Performance Characteristics for: 10 INCH-G-4V-MINI

Parameter, NOTE 1	Minimum	Nominal	Maximum	Units
Operating Range, gage pressure	-	10.0	-	inH2O
Output Span, NOTE 5	3.90	4.0	4.10	V
Offset Voltage @ zero pressure	0.15	0.25	0.35	V
Offset Temperature Shift (5°C-50°C), NOTE 2	-	-	±20	mV
Offset Warm-up Shift, NOTE 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, NOTE 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), NOTE 2	-	-	±1	%FSS

www.allensors.com® Signed Original On File

www.allensors.com® Signed Original On File

Performance Characteristics for 20 INCH-Dx-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	±20.0	-	inH2O
Output Span, note 5	±1.90	±2.0	±2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±20	mV
Offset Warm-up Shift, note 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±1	%FSS

Performance Characteristics for 20 INCH-G-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, gage pressure	-	20.0	-	inH2O
Output Span, note 5	3.90	4.0	4.1	V
Offset Voltage @ zero pressure	0.15	0.25	0.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±20	mV
Offset Warm-up Shift, note 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±1	%FSS

Performance Characteristics for 30 INCH-Dx-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, differential pressure	-	±30.0	-	inH2O
Output Span, note 5	±1.90	±2.0	±2.10	V
Offset Voltage @ zero differential pressure	2.15	2.25	2.35	V
Offset Temperature Shift (5°C-50°C), note 2	-	-	±20	mV
Offset Warm-up Shift, note 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, note 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), note 2	-	-	±1	%FSS

Performance Characteristics for 30 INCH-G-4V-MINI

Parameter, NOTE 1	Minimum	Nominal	Maximum	Units
Operating Range, gage pressure	-	30.0	-	inH2O
Output Span, NOTE 5	3.9	4.0	4.1	V
Offset Voltage @ zero pressure	0.15	0.25	0.35	V
Offset Temperature Shift (5°C-50°C), NOTE 2	-	-	±20	mV
Offset Warm-up Shift, NOTE 3	-	±5	-	mV
Offset Position Sensitivity (±1g)	-	±5	-	mV
Offset Long Term Drift (one year)	-	±5	-	mV
Linearity, hysteresis error, NOTE 4	-	0.05	0.25	%FSS
Span Shift (5°C-50°C), NOTE 2	-	-	±1	%FSS

Pressure Response: for any pressure applied the response time to get to 90% of pressure applied is typically less than 500 useconds.

Specification Notes

NOTE 1: ALL PARAMETERS ARE MEASURED AT 5.0 VOLT EXCITATION, FOR THE NOMINAL FULL SCALE PRESSURE AND ROOM TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PRESSURE MEASUREMENTS ARE WITH POSITIVE PRESSURE APPLIED TO THE B-PORT.

NOTE 2: SHIFT IS RELATIVE TO 25°C.

NOTE 3: SHIFT IS WITHIN THE FIRST HOUR OF EXCITATION APPLIED TO THE DEVICE.

NOTE 4: MEASURED AT ONE-HALF FULL SCALE RATED PRESSURE USING BEST STRAIGHT LINE CURVE FIT.

NOTE 5: THE VOLTAGE ADDED TO THE OFFSET VOLTAGE AT FULL SCALE PRESSURE. NOMINALLY THE OUTPUT VOLTAGE RANGE IS 0.25 TO 4.25 VOLTS FOR MINUS TO PLUS FULL SCALE PRESSURE.

All Sensors reserves the right to make changes to any products herein. All Sensors does not assume any liability arising out of the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А