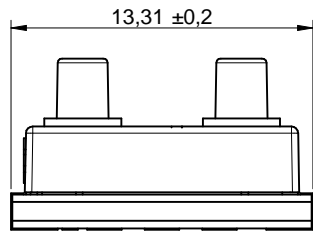
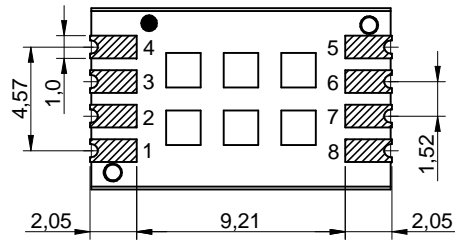
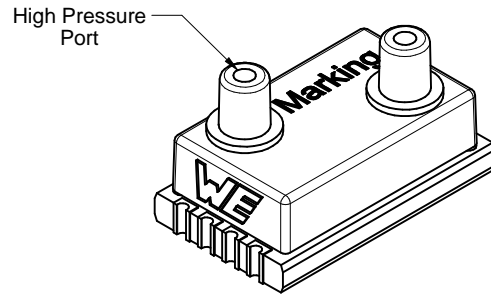
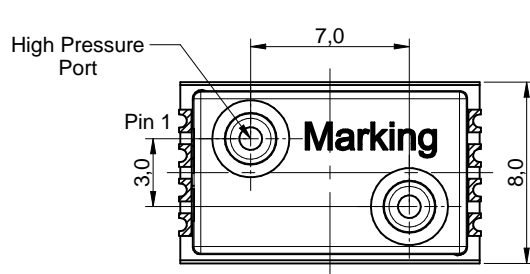
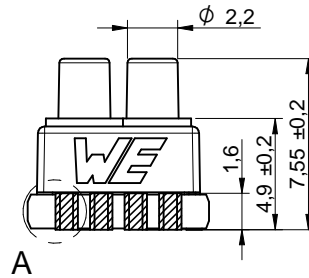
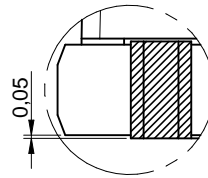


**Dimensions: [mm]**

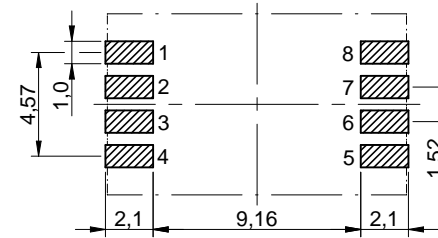


**detail A**



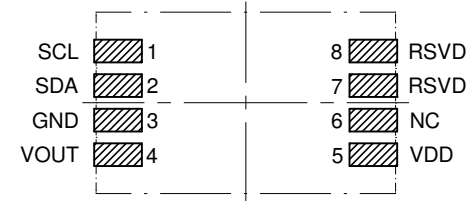
Scale - 3:1

**Recommended Land Pattern: [mm] (Top View)**



Scale - 3:1

**Product Specific Pinning: (Top View)**



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CHECKED NIM	REVISION 001.000	DATE (YYYY-MM-DD) 2019-08-13	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
DESCRIPTION <b>WSEN-PDUS Differential Pressure Sensor</b>			ORDER CODE <b>2513130810201</b>	
BUSINESS UNIT eiSos		STATUS Valid	PAGE 1/6	

## Pressure Sensor Specification:

Properties		Test conditions	Value			Unit
			min.	typ.	max.	
Measurement range	P <sub>RANGE</sub>		-10		10	kPa
Absolute accuracy	ACC <sub>P_ABS</sub>	T = 25 °C	-1 %FSS	±0.5 %FSS	1 %FSS	
Total accuracy	ACC <sub>P_TOT</sub>	T = 0 to 70 °C	-1.25 %FSS	±0.75 %FSS	1.25 %FSS	
Sensitivity (digital)	SEN <sub>p</sub>			7.63*10 <sup>-4</sup> kPa/digit		
Sensitivity (analog)	SEN <sub>P_AN</sub>			5 kPa/V		
Repeatability	ACC <sub>P_REP</sub>			±0.05 %FSS		
Nonlinearity	ACC <sub>P_NL</sub>		-0.3 %FSS	±0.1 %FSS	0.3 %FSS	
Resolution (ADC)	RES <sub>p</sub>			15		bits
Resolution (DAC)	RES <sub>p_DAC</sub>			11		bits
Response time	t <sub>RESP</sub>			2.2		ms
Long term drift	ACC <sub>P_DRIFT</sub>	per year		±0.1 %FSS		

## Temperature Sensor Specification:

Properties		Value			Unit
		min.	typ.	max.	
Measurement range	T <sub>RANGE</sub>	0		70	°C
Sensitivity	SEN <sub>T</sub>		4.272*10 <sup>-3</sup> °C/digit		
Resolution (ADC)	RES <sub>T</sub>		15		bits

## Electrical Properties:

Properties		Value			Unit
		min.	typ.	max.	
Operating supply voltage	V <sub>DD</sub>	4.75	5	5.25	V
Current consumption	I <sub>DD</sub>		4	6.5	mA
Output current analog pin	I <sub>OUT_A</sub>			1	mA
Digital input voltage - high-level	V <sub>IH</sub>	0.7 * V <sub>DD</sub>			

Digital input voltage - low-level	V <sub>IL</sub>			0.3 * V <sub>DD</sub>	
Digital output voltage - high-level	V <sub>OH</sub>	0.9 * V <sub>DD</sub>			
Digital output voltage - low-level	V <sub>OL</sub>			0.1 * V <sub>DD</sub>	

## Absolute Maximum Ratings:

Properties		Value		Unit
		min.	max.	
Input voltage VDD pin	V <sub>DD</sub>	-0.3	6.5	V
Input voltage control pins <sup>1)</sup>	V <sub>IN_MAX</sub>	-0.3	5.5	V
Differential over pressure	P <sub>OVER</sub>		100	kPa
Differential burst pressure	P <sub>BURST</sub>		150	kPa
Common mode pressure	P <sub>CM</sub>		2500	kPa




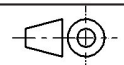

<sup>1)</sup> Control pins are SDA and SCL

## General Information:

Operating Temperature	-25 up to +85 °C
Storage Conditions (in original packaging)	< 40 °C ; < 75 % RH
Compensated temperature range	0 to 70 °C
Communication interface	I <sup>2</sup> C, Analog
Moisture Sensitivity Level (MSL)	1
Electrostatic discharge protection (HBM)	2 kV

## Product Specific Pinning:

Pin	Pad	Description	I/O
SCL	1	I <sup>2</sup> C serial clock	Input
SDA	2	I <sup>2</sup> C serial data	Input/Output
GND	3	Negative supply volage	Supply
VOUT	4	Analog output	Output

  	CHECKED NIM	REVISION 001.000	DATE (YYYY-MM-DD) 2019-08-13	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
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	WÜRTH ELEKTRONIK eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com			BUSINESS UNIT eiSos	STATUS Valid