

PERFORMANCE SPECIFICATIONS (CONTINUED)

PRESSURE OUTPUT CHARACTERISTICS ($V_{DD} = 3\text{ V}$, $T = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Parameter	Conditions		Min.	Typ.	Max	Unit
Operating Pressure Range		P_{range}	0		30	bar
Absolute Accuracy ⁽¹⁾⁽⁴⁾ , Temperature range: 0 ... 45°C	Version -01	0 ... 6 bar	-50		+50	mbar
	Version -26		-75		+75	mbar
Absolute Accuracy ⁽¹⁾⁽⁴⁾ , Temperature range: 0 ... 45°C		0 ... 20 bar	-100		+100	mbar
		0 ... 30 bar	-200		+200	
Absolute Accuracy ⁽¹⁾⁽⁴⁾ , Temperature range: -20 ... 85°C	Version -01	0 ... 6 bar	-100		+100	mbar
	Version -26		-150		+150	mbar
Absolute Accuracy ⁽¹⁾⁽⁴⁾ , Temperature range: -20 ... 85°C		0 ... 20 bar	-200		+200	mbar
		0 ... 30 bar	-400		+400	
Maximum error with supply voltage ⁽²⁾	Version -01	$V_{DD} = 1.5\text{ V}$... 3.6 V		±30		mbar
	Version -26			±75		mbar
Long-term stability				±30		mbar/yr
Reflow soldering impact IPC/JEDEC J-STD-020C	Version -01			±8		mbar
	Version -26			±30		mbar
Recovering time after reflow ⁽³⁾				7		days
Resolution RMS	OSR	8192		0.20		mbar
		4096		0.28		
		2048		0.38		
		1024		0.54		
		512		0.84		
		256		1.57		

(1) With autozero at one pressure point

(2) With autozero at 3V point

(3) Time to recover at least 66% of the reflow impact.

(4) Wet/dry cycle: sensor must be dried typically once a day

TEMPERATURE OUTPUT CHARACTERISTICS ($V_{DD} = 3\text{ V}$, $T = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Parameter	Conditions		Min.	Typ.	Max	Unit
Absolute Accuracy	-20°C ... +85°C		-4		+4	°C
Maximum error with supply voltage	$V_{DD} = 1.5\text{ V} \dots 3.6\text{ V}$			± 0.6		°C
Resolution RMS	OSR	8192		0.0022		°C
		4096		0.0026		
		2048		0.0033		
		1024		0.0041		
		512		0.0055		
		256		0.0086		

PERFORMANCE SPECIFICATIONS (CONTINUED)**DIGITAL INPUTS (SCL, SDA)**

Parameter	Symbol	Conditions	Min.	Typ.	Max	Unit
Serial data clock	SCL				400	kHz
Input high voltage	V_{IH}		80% V_{DD}		100% V_{DD}	V
Input low voltage	V_{IL}		0% V_{DD}		20% V_{DD}	V
Input leakage current	$I_{leak25^{\circ}C}$	at 25°C			0.1	μA

DIGITAL OUTPUTS (SDA)

Parameter	Symbol	Conditions	Min.	Typ.	Max	Unit
Output high voltage	V_{OH}	$I_{source} = 0.6 \text{ mA}$	80% V_{DD}		100% V_{DD}	V
Output low voltage	V_{OL}	$I_{sink} = 0.6 \text{ mA}$	0% V_{DD}		20% V_{DD}	V