PERFORMANCE SPECIFICATIONS (CONTINUED)

PRESSURE OUTPUT CHARACTERISTICS (V_{DD} = 3 V, T = 25°C UNLESS OTHERWISE NOTED)

Parameter	Conditions		Min.	Typ.	Max	Unit
Operating Pressure Range	P_{range}		300		1200	mbar
Extended Pressure Range	P_{ext}	Linear Range of ADC	10		2000	mbar
Relative Accuracy [1] [4]	600...1000 mbar, at 20°C 300...1100 mbar, 0...60°C 300...1100 mbar, -20...85°C		-0.5 -2 -4		+0.5 +2 +4	mbar
Resolution RMS	OSR	8192 4096 2048 1024 512 256		0.016 0.021 0.028 0.039 0.062 0.11		mbar
Maximum error with supply voltage [2]	V_{DD} = 1.5 V…3.6 V			±2		mbar
Long-term stability				±2		mbar/yr
Reflow soldering impact	IPC/JEDEC J-STD-020C (Refer to application note AN808)			±4		mbar
Recovering time after reflow [3]				7		days

[1] With autozero at one pressure point

[2] With autozero at 3V point

[3] Time to recover at least 66% of reflow impact

[4] Wet/dry cycle: sensor must be dried typically once a day

TEMPERATURE OUTPUT CHARACTERISTICS (V_{DD} = 3 V, T = 25°C UNLESS OTHERWISE NOTED)

Parameter	Conditions		Min.	Typ.	Max	Unit
Relative Accuracy	0…60°C, 600…1100 mbar			±1		°C
	-20…85°C, 300…1100 mbar		-2		+2	°C
Maximum error with supply voltage	V_{DD} = 1.5 V…3.6 V			±0.3		°C
Resolution RMS	OSR	8192 4096 2048 1024 512 256		0.002 0.003 0.004 0.006 0.009 0.012		°C

DIGITAL INPUTS (SDA, SCL)

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_{leak}	T = 25 °C			0.1	µA

DIGITAL OUTPUTS (SDA)

Parameter	Symbol	Conditions	Min.	Typ.	Max	Unit
Output high voltage	V_{OH}	I_{source} = 1 mA	80% V_{DD}		100% V_{DD}	V
Output low voltage	V_{OL}	I_{sink} = 1 mA	0% V_{DD}		20% V_{DD}	V