## 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<br>300...1100 mbar, 0...60°C<br>300...1100 mbar, -20...85°C | | -0.5<br>-2<br>-4 | | +0.5<br>+2<br>+4 | mbar |
| Resolution RMS | OSR | 8192<br>4096<br>2048<br>1024<br>512<br>256 | | 0.016<br>0.021<br>0.028<br>0.039<br>0.062<br>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<br>(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<br>4096<br>2048<br>1024<br>512<br>256 | | 0.002<br>0.003<br>0.004<br>0.006<br>0.009<br>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 |