

### Acceleration Sensitivity (G-sensitivity)

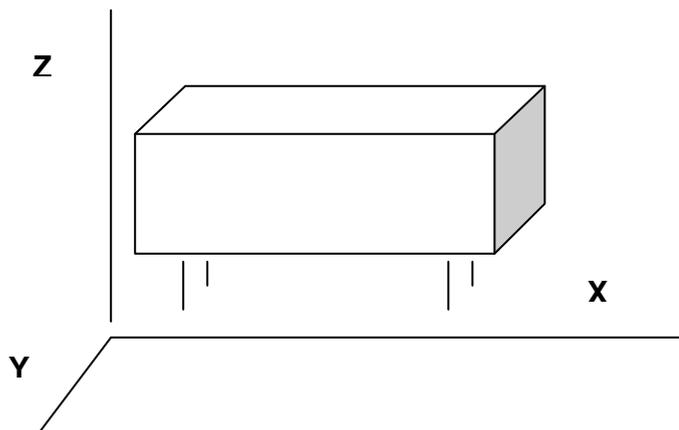
Acceleration sensitivity is defined as the frequency shift caused by subjecting the oscillator to acceleration:

$$s = \Delta f / (f_0 * g)$$

with  $s$  = G-sensitivity  
 $g$  = sine vibration (number of g)  
 $f_0$  = nominal oscillator frequency  
 $\Delta f$  = frequency shift

The table shows the maximum G-sensitivity for different types of oscillators and different crystal cuts in the vibration frequency range 5 to 2000 Hz. The nominal Frequency of the tested oscillators was 10 MHz in all cases.

10MHz				
	QO1320		QO2020 / QO2626 / QO2736	
	AT	SC	AT	SC
x-Achse	1*10 <sup>-9</sup>	2*10 <sup>-10</sup>	1*10 <sup>-9</sup>	5*10 <sup>-11</sup>
y-Achse	2*10 <sup>-9</sup>	5*10 <sup>-10</sup>	3*10 <sup>-9</sup>	1*10 <sup>-10</sup>
z-Achse	2*10 <sup>-9</sup>	5*10 <sup>-10</sup>	3*10 <sup>-9</sup>	5*10 <sup>-11</sup>
<b>S<sub>max</sub></b>	<b>2*10<sup>-9</sup></b>	<b>5*10<sup>-10</sup></b>	<b>3*10<sup>-9</sup></b>	<b>1*10<sup>-10</sup></b>



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