



### Features and Benefits

Frequency range: 25MHz  
Supply voltage: 3.3V  
Current: 10mA Max.  
Frequency stability vs. temperature: ±50PPM  
Aging: ±3PPM 1<sup>st</sup> year  
Operating temperature: -10°C to +70°C  
Size: 3.2x2.5x1.0 mm

### Typical Applications

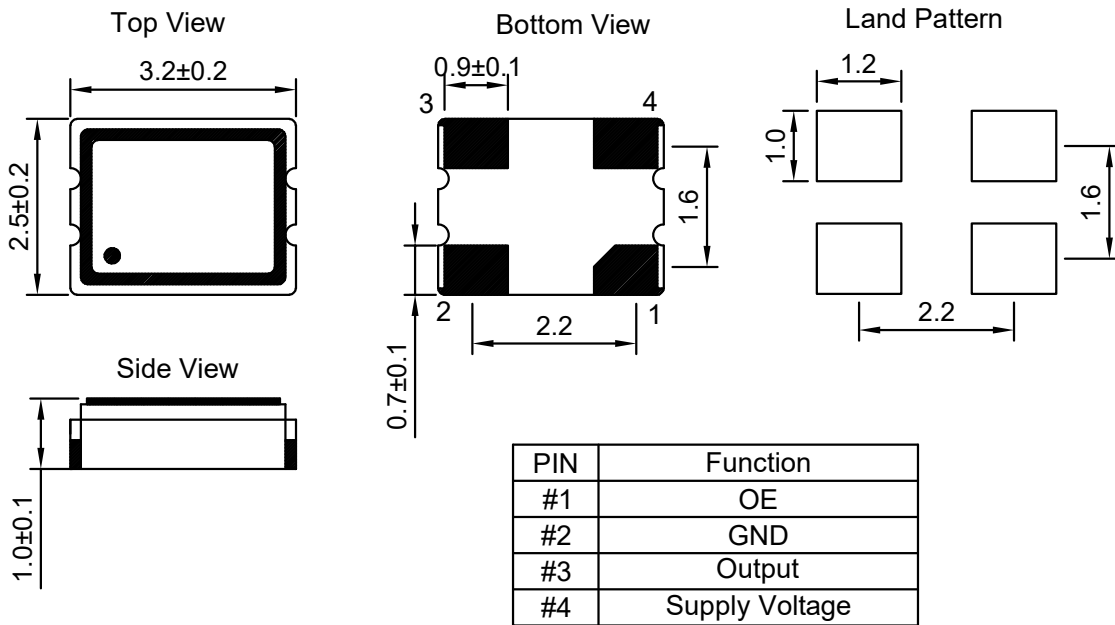
Wearable device  
Sport Video Cams  
Ultra-small Notebook PC  
Mobile Phones  
Digital Circuit

### Description

XO3225BL-ULJ\_CMOS-25MHz-123 is the ultra-low jitter crystal oscillator.  
The RMS phase jitter can be 48fs typical. It can be widely used in the digital circuit and communication applications.

### Mechanical Drawing & Pin Connections

Drawing No: MD230030-1



Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f <sub>0</sub>			25		MHz	
<b>RF Output</b>							
Output Load				15		pF	
Output Level High			90%V <sub>cc</sub>			V	
Output Level Low					10%V <sub>cc</sub>	V	
Rise / Fall Time		@10%-90% of V <sub>cc</sub>		1.5	5	ns	
Duty Cycle			45		55	%	
Startup Time				0.8	5	ms	
Output Enable/Disable Function on PIN1		Enable output	70%V <sub>cc</sub>			V	
		Disable output			30%V <sub>cc</sub>	V	
Enable/Disable Time		Enable			1	ms	
		Disable			200	ns	
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>	±10%		3.3		V	
Current				7	10	mA	
Current With Output Disable				9	35	uA	
<b>Frequency Stability</b>							
Supply Voltage Vs. Frequency Sensitivity		@25°C			±1.0	ppm	
Vs. Temperature		@-10°C to +70°C			±50	ppm	
Aging@+25°C		1 <sup>st</sup> year			±3.0	ppm	
RMS Jitter (12KHz-20MHz)				48	300	fs	
<b>Environmental Conditions</b>							
Operating temperature range		-10°C to +70°C					
Storage temperature range		-55°C to +150 °C					