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XO2520BL-ULJ_CMOS-25MHz-223
Ultra-Low Jitter Crystal Oscillator

Features and Benefits

Frequency range: 25MHz
Supply voltage: 3.3V
Current: 10mA Max.
Frequency stability vs. temperature: ±50PPM
Aging: ±3PPM 1st year
Operating temperature: -40°C to +85°C
Size: 2.5x2.0x0.9 mm

Typical Applications

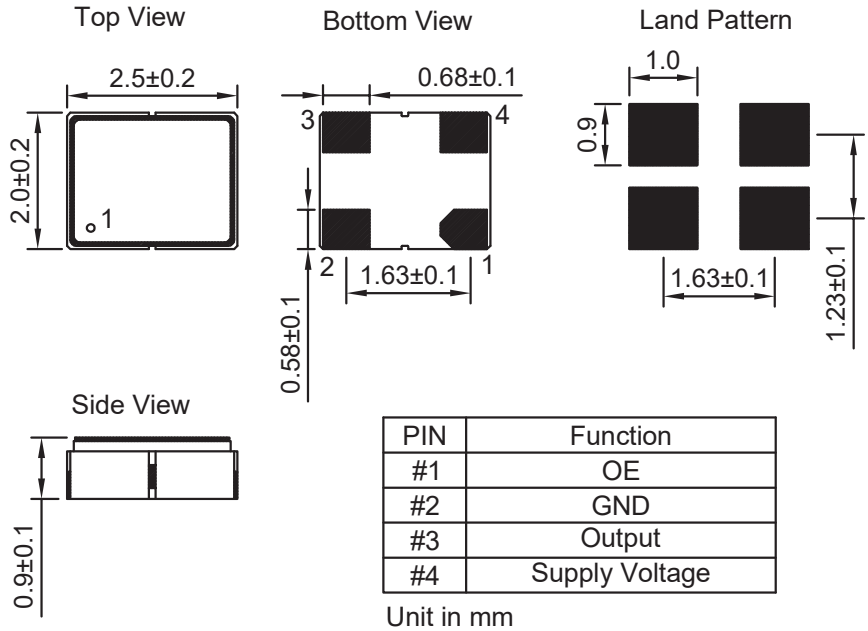
- Wearable device
- Sport Video Cams
- Ultra-small Notebook PC
- Mobile Phones
-Digital Circuit

Description

XO2520BL-ULJ_CMOS-25MHz-223 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: MD230031-1



PIN	Function
#1	OE
#2	GND
#3	Output
#4	Supply Voltage

Unit in mm
1mm = 0.0394 inches

Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f_0			25		MHz	
RF Output							
Output Load				15		pF	
Output Level High			2.97			V	
Output Level Low					0.33	V	
Rise / Fall Time		@10%-90% of V_{cc}		1.5	5	ns	
Duty Cycle			45		55	%	
Startup Time				0.8	5	ms	
Output Enable/Disable Function on PIN1		Enable output	70%V_{cc}			V	
		Disable output			30%V_{cc}	V	
Enable/Disable Time		Enable			1	ms	
		Disable			200	ns	
Power Supply							
Voltage	V_{cc}	±10%		3.3		V	
Current				7	10	mA	
Current With Output Disable				9	35	uA	
Frequency Stability							
Supply Voltage Vs. Frequency Sensitivity		@25°C			±1.0	ppm	
Vs. Temperature		@-40°C to +85°C			±50	ppm	
Aging@+25°C		1st year			±3.0	ppm	
SSB phase noise		10Hz		-68		dBc/Hz	
		100Hz		-102			
		1KHz		-139			
		10KHz		-157			
		100KHz		-170			
		1MHz		-166			
		5MHz		-168			
RMS Jitter (12KHz-20MHz)				48	300	fs	
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +150 °C					