



### Features and Benefits

Frequency from 0.75 MHz up to 80.00 MHz  
Sub miniature package: 2.0 x 1.6 x 1.0 mm  
High shock and vibrational resistivity

### Typical Applications

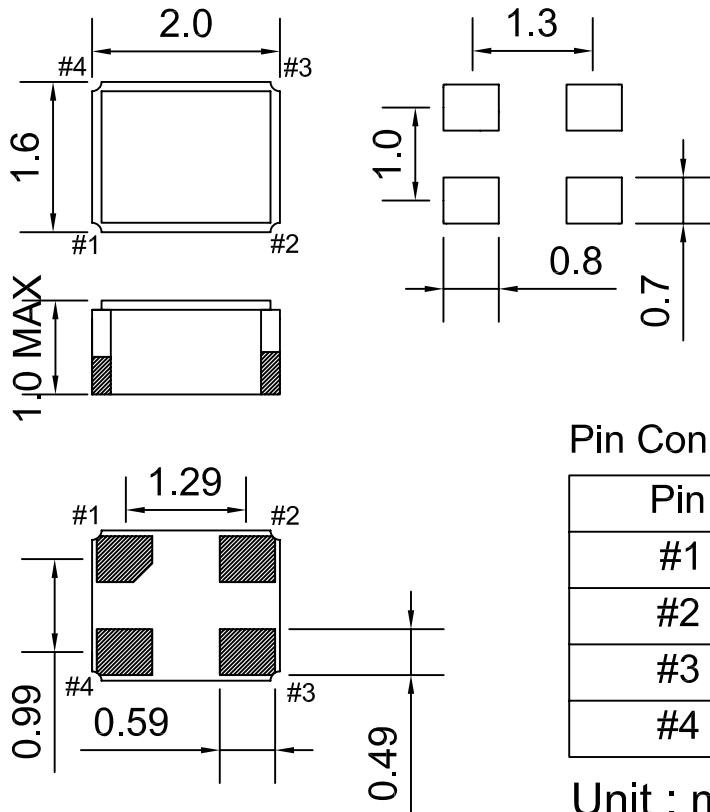
Telecommunications  
Wireless communications

### Description

XO2016Z1 offers wide frequency range, operating temperature and frequency stability options, along with high shock and vibrational resistivity all in a sub miniature package, ideal for various telecommunication and wireless communication applications.

### Mechanical Drawing & Pin Connections

Drawing No: MD170034-1



### Pin Connection

Pin	Function
#1	Tri-state
#2	GND
#3	Output
#4	VDD

Unit : mm

1mm=0.0394inch



### Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F <sub>nom</sub>		0.75		80.00	MHz	
Standard Frequencies			4.0, 12.0, 16.0, 20.0, 24.0, 26.0, 32.0, 38.4, 40.0, 75.0			MHz	
Output Waveform			CMOS				
Output Level			V <sub>OH</sub> ≥ 0.9V <sub>cc</sub> V <sub>OL</sub> ≤ 0.1V <sub>cc</sub>			Vdc	
Output Load			15			pF	
Symmetry		@ ½Vdc	45		55	%	
Rise / Fall Time			3 ~ 5			ns	
Tri-state function		Pin #3 → signal Pin #3 → high impedance	Pin #1 = high or open Pin #1 = low				
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>	±5%		+1.8		V	
Supply Current				<7		mA	
<b>Frequency Stability</b>							
Frequency Stability vs. Temperature Tolerance			±25		±100	ppm	
Aging							
Supply and Load Variation							
<b>Environmental Conditions</b>							
Operating temperature range	-20°C to +70°C for commercial applications -40°C to +85°C for industrial applications						
Storage temperature range	-55°C to +125°C						

### Ordering Options: Operating Temperature and Frequency Stability

Operating Temperature (w)		Frequency Stability (z)	
Code	T (°C)	Code	Stability [ppm]
1	-20 to +70	1	±25
2	-40 to +85	2	±50
		3	±100

### Ordering Codes

Model	Frequency in MHz (up to 4 digits)	Operating Temperature	Frequency Stability
XO2016Z1	xx.yyyy	w	Z

Example: XO2016Z1-26.0000-2-3 has the following specifications

Operating Frequency = 26.0000 MHz  
 Operating Temperature = -40°C to +85°C  
 Frequency Stability = ±100 ppm

Example for IR reflow soldering temperature

