



### Features and Benefits

Frequency from 1 MHz up to 80 MHz  
Sub miniature package: 2.5 x 2.0 x 1.0 mm  
High shock and vibrational resistivity

### Typical Applications

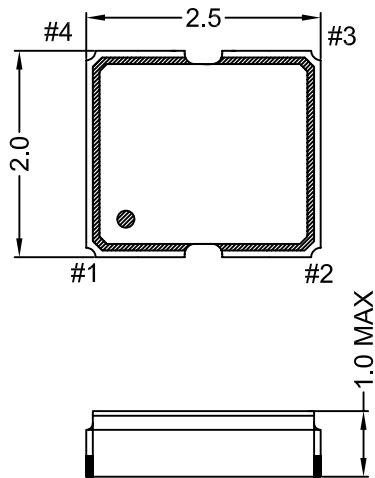
Telecommunications  
Wireless communications

### Description

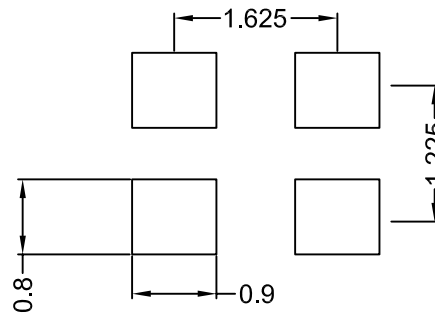
XO2520ZH offers wide frequency range, operating temperature and frequency stability options, along with high shock and vibrational resistivity all in a sub miniature package, ideal for various telecommunication and wireless communication applications

### Mechanical Drawing & Pin Connections

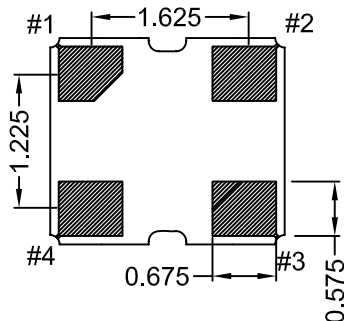
Drawing No: MD1\*00) 3-&



### Solder Pattern



Do not design any conductive path between the pattern



### Pin Connection

Pin	Function
#1	Tri-State
#2	GND
#3	Output
#4	Vdc

Unit in mm  
1mm = 0.039 inches



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F		1		80	MHz	
Standard Frequencies			12.0, 16.0, 20.0, 24.0, 26.0, 27.0, 38.4, 40.0			MHz	
Output Waveform			CMOS				
Output Level			$V_{OH} \geq 0.9V_{CC}$ $V_{OL} \leq 0.1V_{CC}$			Vdc	
Output Load				15		pF	
Symmetry		@ 1/2Vdc	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%		+3.3		V	
Supply Current				<15		mA	
<b>Frequency Stability</b>							
Frequency Stability vs. Temperature Tolerance Aging Supply and Load Variation			±25		±50	ppm	
<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

## Ordering Codes

Model	Frequency in MHz (up to 4 digits)	Operating Temperature	Frequency Stability
XO2520Z3	xx.yyyy	w	Z

Example: XO2520Z3-26.0000-2-2 has the following specifications

Operating Frequency = 26.0000 MHz  
 Operating Temperature = -40°C to +85°C  
 Frequency Stability = ±50 ppm

## Example for IR reflow soldering temperature

