



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

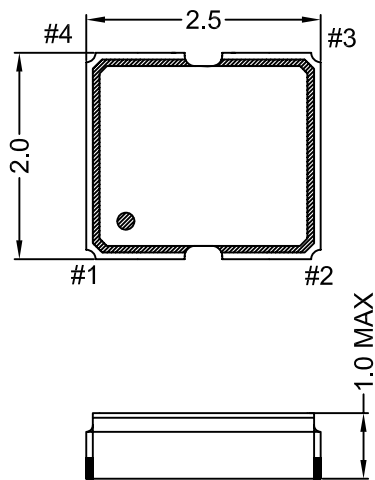
Telecommunications
Wireless communications

Description

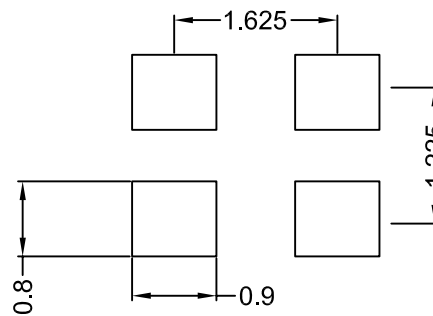
XO2520Z1 offers wide frequency range, operating temperature and frequency stability options, along with high shock and vibrational resistivity all in a sub miniature package, ideal for various telecommunication and wireless communication applications

Mechanical Drawing & Pin Connections

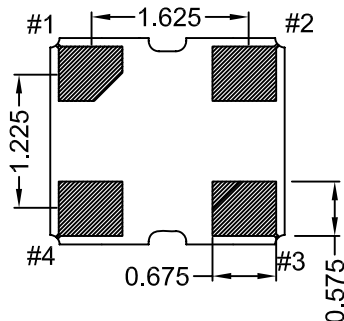
Drawing No: MD1*00) 3-&



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				
Power Supply							
Voltage	V _{cc}	±5%		+1.8		V	
Supply Current				<7		mA	
Frequency Stability							
Frequency Stability vs. Temperature Tolerance			±25		±50	ppm	
Aging							
Supply and Load Variation							
Environmental Conditions							
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
XO2520Z1	xx.yyyy	w	Z

Example:XO2520Z1-26.0000-2-2 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

