



Features and Benefits

Frequency from 32.768 KHz up to 133 MHz
Miniature package: 3.2 x 2.5 x 1.2 mm
High shock and vibration resistant

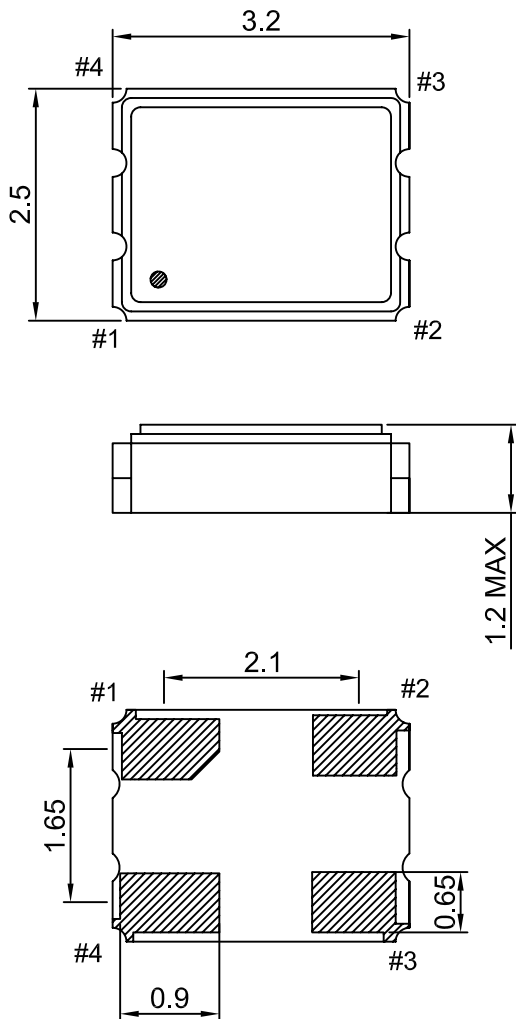
Typical Applications

Telecommunications
Wireless communications

Description

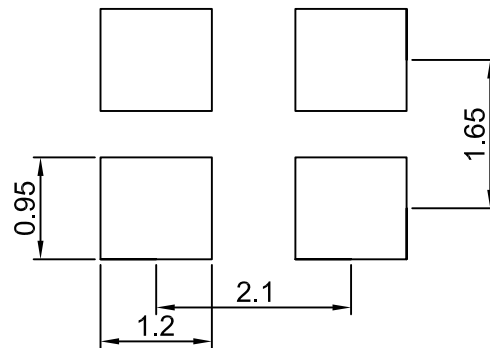
XO3225Z1 offers wide frequency range, operating temperature and frequency stability options, along with resistant to high shock and vibration, all in a miniature package, ideal for various telecommunication and wireless communication applications.

Mechanical Drawing & Pin Connections



Drawing No: MD160027-2

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		32.768 KHz to 133 MHz				
Standard Frequencies			32.768 KHz, 2.0, 4.0, 12.0, 16.0, 20.0 24.0, 32.0, 75.0, 125.0			MHz	
Output Waveform			CMOS				
Output Level			V _{OH} ≥ 0.9V _{cc} V _{OL} ≤ 0.1V _{cc}			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				
Power Supply							
Voltage	V _{cc}	±5%		+1.8		V	
Supply Current				<35		mA	
Frequency Stability							
Frequency Stability vs. Temperature Tolerance Aging Supply and Load Variation			±10		±50	ppm	
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	±20
2	-40 to +85	2	±50

Ordering Codes

Model	Frequency in MHz (up to 4 digits)	Operating Temperature	Frequency Stability
XO3225Z1	xx.yyyy	w	Z

Example: XO3225Z1-125.0000-2-2 has the following specifications

Operating Frequency = 125.0000 MHz
 Operating Temperature = -40°C to +85°C
 Frequency Stability = ±50 ppm

Example for IR reflow soldering temperature

