



**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

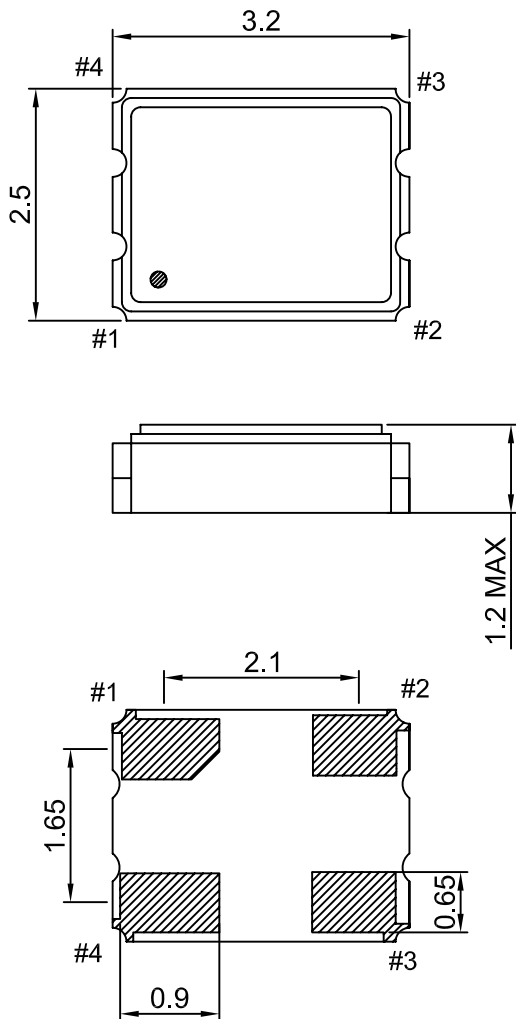
**Typical Applications**

Telecommunications  
 Wireless communications

**Description**

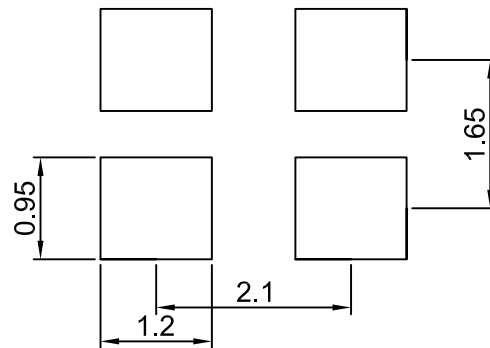
XO3225ZG offers wide frequency range, operating temperature and frequency stability options, along with resistant to high shock and vibration, all in a miniature package, ideal for various telecommunication and wireless communication applications.

**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			$V_{OH} \geq 0.9V_{CC}$ $V_{OL} \leq 0.1V_{CC}$			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%		+2.5		V	
Supply Current				<30		mA	
<b>Frequency Stability</b>							
Frequency Stability vs. Temperature Tolerance			±10		±50	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	±20
2	-40 to +85	2	±50

### Ordering Codes

Model	Frequency in MHz (up to 4 digits)	Operating Temperature	Frequency Stability
XO3225Z2	xx.yyyy	w	Z

Example: XO3225Z2-125.0000-2-2 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

