

# SMX-3C

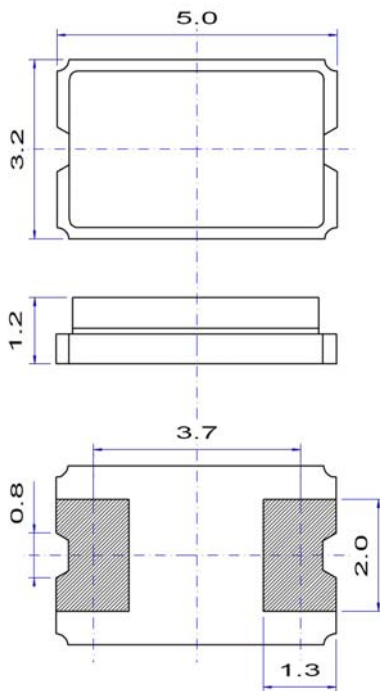


## Full ceramic SMD Crystal

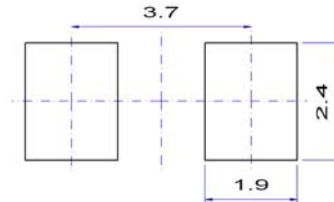
### Features

- Applications: telecommunications, audio, automotive, instruments
- Small package size
- Reliable, low cost crystal
- Reflow soldering @ 260 °C

Parameter	Specification	
Frequency range	8 ~ 67 MHz	fundamental
Mode of oscillation	AT-cut	
Standard frequencies	8.00, 13.00, 16.00, 19.20, 20.00, 24.576, 25.00 & 32.00 MHz	
Frequency tolerance	±25 ~ ±50 ppm	@ +25 °C
Frequency stability	±10 ~ ±50 ppm	vs. operating temperature range
Aging	±2 ppm	1 <sup>st</sup> year
Load capacitance	series or parallel resonance (CL = 8 ~ 32 pF)	
Equivalent series resistance (ESR)	< 12 Ω	@ 16 MHz
	< 10 Ω	@ 32 MHz
Drive level	10 ~ 100 μW	
Operating temperature range	-20 ~ +70 °C	commercial application
	-40 ~ +85 °C	industrial application
	-40 ~ +125 °C	automotive application
Storage temperature range	-55 ~ +125 °C	
Packaging unit	tape & reel	1'000 or 2'000 pieces
Customer specifications on request		



Example for soldering pattern



**Do not design any conductive path between the pattern**

Example for IR reflow soldering temperature

