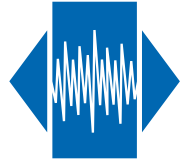


SMX-1R

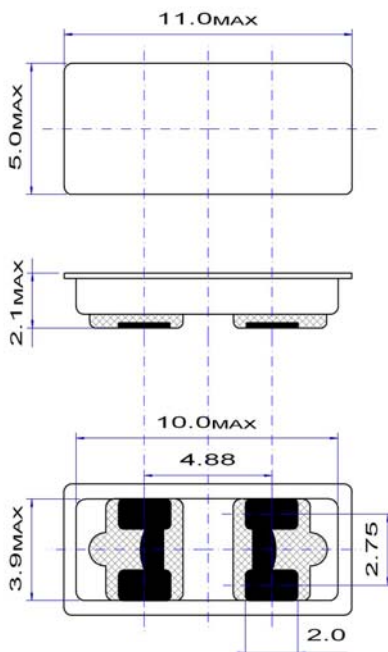


SMD Crystal

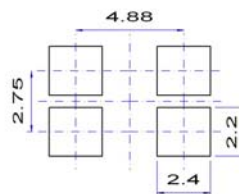
Features

- Applications: telecommunications, audio, automotive, instruments
- Low frequency down to 3.2 MHz
- High reliable, hermetic sealed package
- High shock and vibrational resistivity
- Reflow soldering @ 260 °C

Parameter	Specification	
Frequency range	3.2 ~ 40 MHz 22 ~ 46 MHz 32 ~ 65 MHz	fundamental, AT-cut fundamental, BT-cut 3 rd overtone, AT-cut
Mode of oscillation	AT-cut and BT-cut	
Standard frequencies	4.00, 4.9152, 8.00, 10.00, 13.0133, 16.384 & 20.00 MHz	
Frequency tolerance	±10 ~ ±30 ppm	@ +25 °C
Frequency stability	±20 ~ ±50 ppm	vs. operating temperature range
Aging	±2 ppm	1 st year
Load capacitance	series or parallel resonance (CL = 8 ~ 32 pF)	
Equivalent series resistance (ESR)	< 50 Ω < 35 Ω	@ 13 MHz @ 32 MHz
Drive level	10 ~ 100 μW	
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C -40 ~ +125 °C	commercial application industrial application automotive & avionic 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

