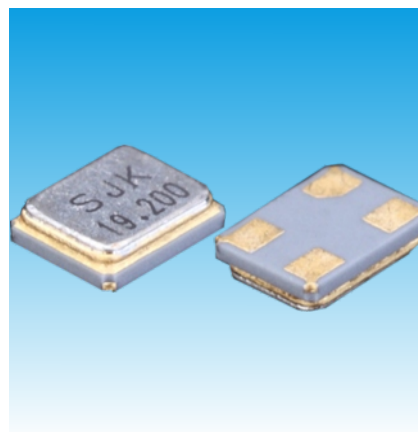


## Features

- 2016 size ultra miniature and lightweight SMD crystal units with low profile of 0.5mm
- Frequency range from 16MHz to 54MHz
- High precision and high frequency stability
- Allowing for high density surface mounting
- Automatic mounting and reflow soldering
- Application for wireless communications, PC, IPAD, PDA, Wearable device, etc.
- RoHS Compliant /Pb Free



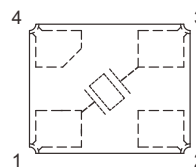
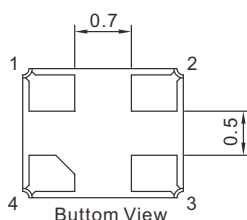
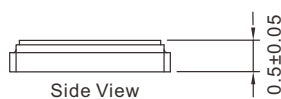
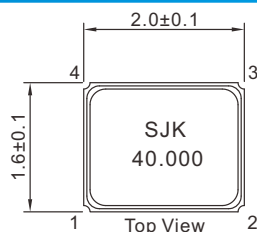
## Standard Specification

Item /Type	7F (7F Series SMD Crystal Units)
Frequency Range	16~54 MHz
Frequency Tolerance (at 25°C)	±10ppm, ±20ppm, or specify
Frequency stability Over Operating Temperature	±10ppm, ±20ppm, or specify
Operating Temperature Range	-20~+70°C, or specify
Shunt Capacitance (C <sub>0</sub> )	5pF Max.
Drive Level	1~200μW (50μW Typ.)
Load Capacitance	8pF, 10pF, or specify
Aging (at 25°C)	±3ppm /year Max.
Storage Temperature Range	-55~+125°C
Packing Unit	3000pcs.

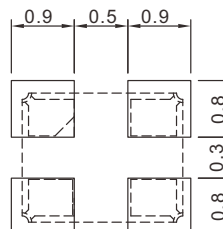
## Equivalent Series Resistance

Fundamental	
16~19.2 MHz	200Ω Max.
19.2~30 MHz	100Ω Max.
30~54 MHz	80Ω Max.

## Dimensions [mm]



Top View Crystal Connection



Top View Suggested Layout