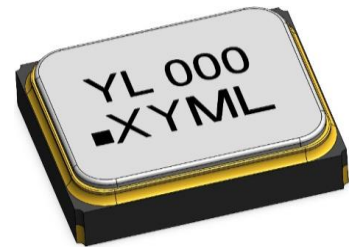


SMD MHz Quartz Crystal Resonator 9Y-Series for Automotive (2016)



■ Features

- Size (L x W) 2.0 x 1.6, Height (Max.) 0.55 mm
- AEC-Q200 qualified

■ Applications

- TPMS, RKE, front lighting system etc.
- ADAS, camera/radar system, IVI, car audio, etc.
- BMS, charger, converter, etc.



■ General Specifications

#	Items	Parameters
1	Frequency range	16 to 50MHz
2	Oscillation mode	Fundamental
3	Frequency tolerance at 25°C	±10, ±15, ±20, ±30, ±50 ppm
4	Frequency stability Vs. Operating temperature range	See below Table 1
5	Equivalent series resistance	See below Table 2
6	Drive level	10, 100, 200 μW or specify
7	Insulation resistance	500 MΩ Min. at DC 100V
8	Load capacitance	8, 10, 12 pF or specify
9	Shunt capacitance (C0)	3 pF Max. or specify
10	Aging at 25°C	±3 ppm / year or specify

■ Tab. 1: Frequency Stability Vs. Operating Temperature Range

Temp. \ (ppm)	±30	±50	±100
-40 to +105 °C	●	●	●
-40 to +125 °C		●	●

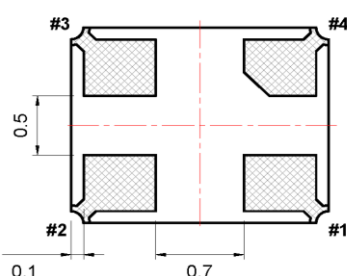
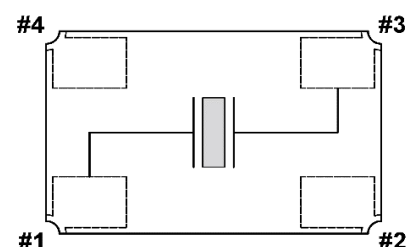
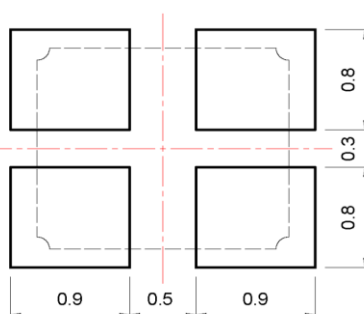
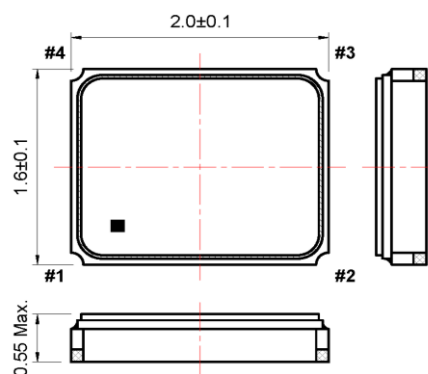
■ Tab. 2: Equivalent Series Resistance

Frequency (MHz)	ESR _{MAX} (Ω)	Oscillation mode
16 to 20	120	Fundamental
20 to 32	80	
32 to 50	50	

Note: The mark “●” denotes our achieved level

■ Package Dimensions & Recommended Land Pattern (Unit: mm)

■ Pad Functions



Pad Connections	
1	In / Out
2	Ground
3	Out / In
4	Ground

