



KYOCERA Corporation  
 Corporate Electronic Components Group  
 RF Devices Division

Quartz Crystal "CX2016SA series"  
 KYOCERA Part Number : CX2016SA38400H0FRNC1

for Automotive
AEC-Q200 Certified

Note: This is a preliminary specification.

If you would like to know official specification and details specification, please contact us.

1.RATINGS				
Items	SYMB.	Rating	Unit	Rmarks
Operating Temperature Range	Topr	-40 to +105	°C	
Storage Temperature Range	Topr	-40 to +125	°C	

2.Electrical Characteristics							
Item	Electrical Specification					Test Conditions	Remarks
	SYMB.	Min.	Typ.	Max.	Unit		
Mode of Vibration		Fundamental					
Nominal Frequency F0	F0		38.4		MHz		
Nominal Temperature	T <sub>NOM</sub>		+25		°C		
Load Capacitance	CL	12.0			pF		
Frequency Tolerance	df/F	-10.0		+10.0	PPM	+25±3° C	by Measurement Conditions
Frequency Temperature Characteristics	df/F	-25.0		+25.0		-40 to +105° C	Based on an oscillation frequency at +25 °C
Frequency Aging Rate							5 years
Equyvalent Series Resistance	ESR			60	Ω		by Measurement Conditions
Drive Level	Pb	0.01		200	μW		
Insulation Resistance	IR	500			MΩ	100V(DC)	

### 3.Measurement Condition

#### Frequency measurement

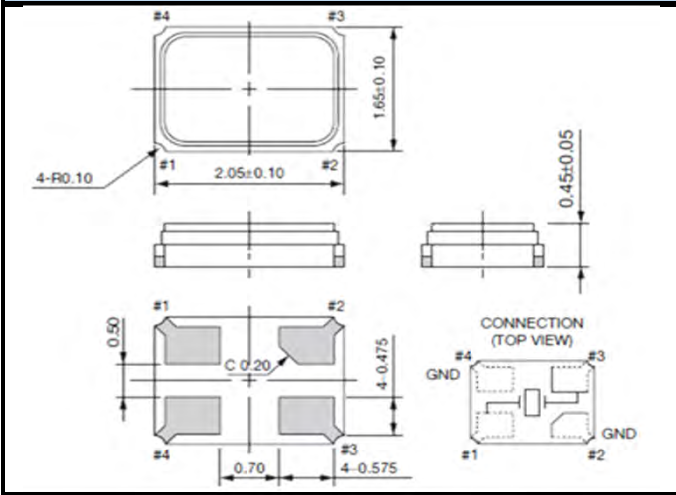
Measuring instrument : IEC PI-Network Test Fixture  
Load capacitance :12.0pF  
Drive Level :10 $\mu$ W

#### Equivalent series resistance (ESR) measurement

Measuring instrument : IEC PI-Network Test Fixture  
Load capacitance :Series  
Drive Level :10 $\mu$ W

### 4.Dimensions

(Unit:mm)



### 5.Recommended Land Pattern

(Unit:mm)

