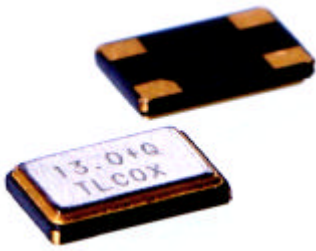


Ceramic SMD Crystal Unit

High stability



AXX7050

Features

- 10 to 160 MHz
- High stability type vacuum sealed unit
- Suitable for telecommunications equipment
- Package : Metal lid + Ceramic base
- 7.0 × 5.0 × 1.4mm

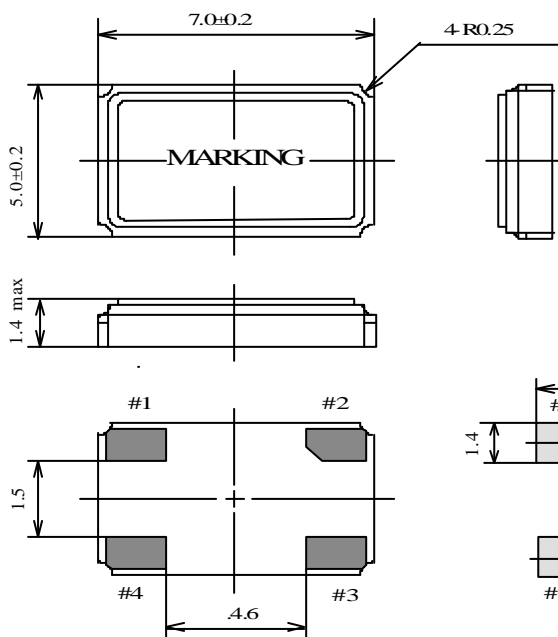
Electrical Performance

Description	Symbols	Specification	Conditions
Frequency Range	Fr	10.000 ~ 45.000 MHz	Fundamental
		45.000 ~ 120.000 MHz	3rd overtone
		90.000 ~ 160.000 MHz	5th overtone
Frequency Tolerance	dF/F	± 10 ~ ± 30 ppm	at 25 ± 3 °C
Frequency Temp. Characteristic	dFt/F	± 5 ~ ± 50 ppm	
Operating Temperature Range		-10 ~ +60 °C, -30 ~ +85 °C	
Storage Temperature Range		-40 ~ +85 °C	
Equivalent Series Resistance	Rr	See below table	
Parallel Capacitance	Co	7.0 pF max	
Load Capacitance	CL	8.0 pF ~ Series resonance	
Drive Level	DL	10 ~ 1000 μW	

Environmental Characteristics

Description	Symbols	Specification
Aging (First Year)		± 2.0 ppm max
Shock Resistance		± 2.0 ppm max Test standard: 3times free drop on to hard wooden board from 75cm high
Vibration Resistance		± 2.0 ppm max Test standard: Frequency from 10 to 500Hz, Amplitude at 1.5mm or 10G whichever is smaller for 2hours each per plane X,Y and Z
Insulation Resistance		500M min. at DC 100 ± 15V

Outline Drawing & Suggested Pad



Equivalent Series Resistance

Frequency Range	Equivalent Series Resistance (ESR)	Mode
10.0 ~ 11.9 MHz	40 max	Fundamental
12.0 ~ 14.9 MHz	35 max	
15.0 ~ 19.9 MHz	30 max	
20.0 ~ 44.9 MHz	20 max	
45.0 ~ 59.9 MHz	55 max	3rd overtone
60.0 ~ 89.9 MHz	50 max	
90.0 ~ 120 MHz	45 max	
90.0 ~ 160 MHz	90 max	5th

Connection

- #1 : Input
- #2 : Nc
- #3 : Output
- #4 : Ground

Suggested Pad (Top View)