



■ SMD X-TAL 7.0×5.0mm 4PAD Seam Sealing

- Miniature and lightweight Surface Mount package
- Fundamental and 3rd overtone crystal design
- Wide temperature and Ultra low ESR
- AEC-Q200 available
- Applications : Consumer electronics, Communications, Test equipment, Automotive electronics

■ Standard Specification

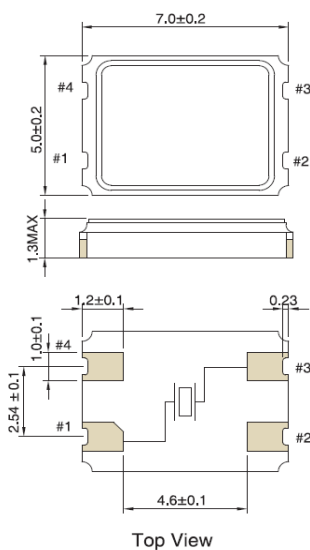
Frequency range	6.000MHz to 160.000MHz	
Oscillation mode	Fundamental & 3rd overtone	
Load capacitance (CL)	6pF to 32pF or please specify	
Frequency tolerance (25°C)	±10ppm, ±20ppm, ±30ppm	
Frequency Stability vs Temp range	Temp Stability	Operating temp
	±10ppm	-20 to +70°C
	±15ppm	-30 to +85°C
	±20ppm	-40 to +85°C
	±30ppm	-40 to 105°C
±50ppm	-40 to 125°C	
Storage temperature range	-55°C to +125°C	
Shunt Capacitance (C0)	7.0pF Max	
Level of drive (DL)	100µW Max (std) or please specify	
Aging (Initial first year)	± 3ppm Max	

■ Motional resistance (ESR)

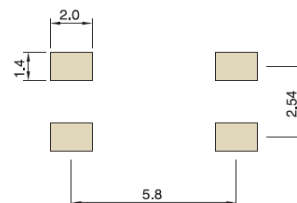
Frequency (MHz)	6.0 ≤ f < 10	10 ≤ f < 20	20 ≤ f < 48	40 ≤ f < 160
Cl (Ω) max	70	50	40	80
Oscillation mode	Fundamental			3rd overtone

*Please contact us for lower ESR

■ Dimensions (mm)



• Recommended Soldering Pattern



CONNECTION
 #1 : X-TAL
 #2 : GND
 #3 : X-TAL
 #4 : GND