



XL-1A and XL-1C Crystal Resonators

CONNOR WINFIELD



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Description:

The Connor-Winfield XL-1A and XL-1C crystal resonators are a series of fundamental and overtone AT-cut crystals for use in many crystal applications. They are available in a 7.62x5.08mm hermetic ceramic package.

Features:

- Fundamental or Overtone AT-cut Crystal
- Frequency Calibration ± 50 ppm
- Temperature Stability ± 50 ppm
- Surface Mount Package
- Tape and Reel Packaging
- RoHS Compliant / Lead Free

Absolute Maximum Ratings

Parameter	Minimum	Nominal	Maximum	Units	Notes
Storage Temperature	-55	-	125	°C	

** Not all frequencies are available at Digi-Key

Electrical Specifications

Parameter	Minimum	Nominal	Maximum	Units	Notes
Frequency Range	8	-	100	MHz	
Frequency Tolerance	-50	-	50	ppm	@ 25°C
Temperature Stability	-50	-	50	ppm	
Operating Temperature Range	-10	-	60	°C	
Shunt Capacitance	-	-	7	pF	
Equivalent Series Resistance	See table below				
Load Capacitance	See table below				
Drive Level	0.1			mW	Typical
Shock Resistance				± 5	ppm 1
Vibration Resistance				± 5	ppm 2
Insulation Resistance	500	-	-	M Ohm	@100Vdc ± 15 Vdc

Notes:

- 1) Shock Test Standard: 3 times from 75cm height onto a hard wooden board.
- 2) Vibration Test Standard: 10 to 500Hz, Amplitude: 1.5mm or 10G, whichever is smaller.

Package Outline

Package	Description
Model XL-1A:	2-Pad configuration (see page 2 for package details)
Model XL-1C:	4-Pad configuration (see page 2 for package details)

Frequency Range Table

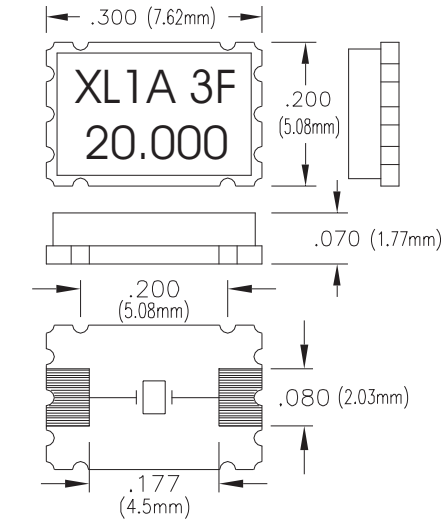
Frequency range	Mode of Oscillation	E.S.R.	CL
8.000MHz to 9.999MHz	Fundamental	80 ohm Max	16pF
10.000MHz to 15.999MHz	Fundamental	60 ohm Max	16pF
16.000MHz to 50.000MHz	Fundamental	40 ohm Max	16pF
28.000MHz to 84.000MHz	3rd Overtone	60 ohm Max	Series
84.001MHz to 100.000MHz	5th Overtone	80 ohm Max	Series



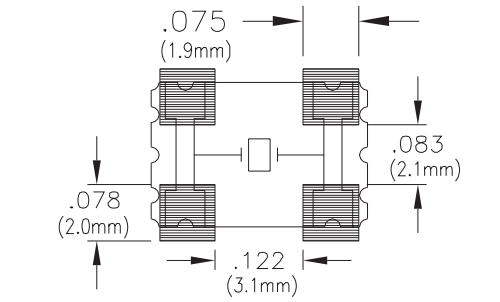
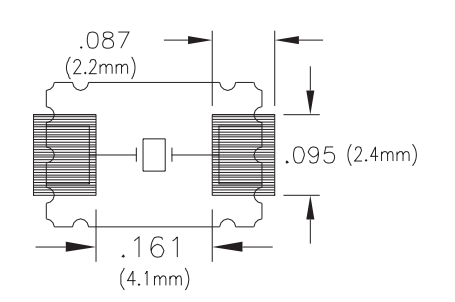
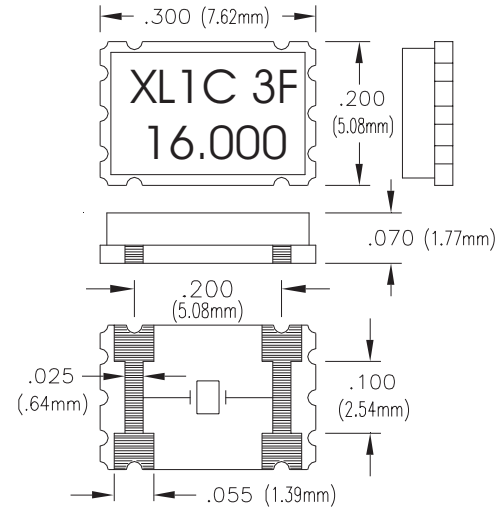
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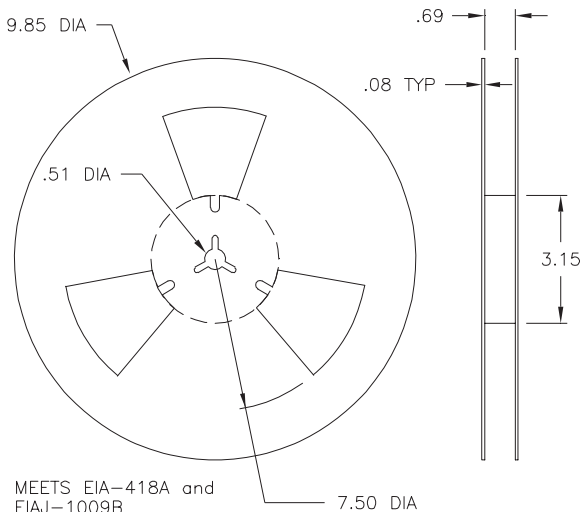
Package Outline: XL-1A



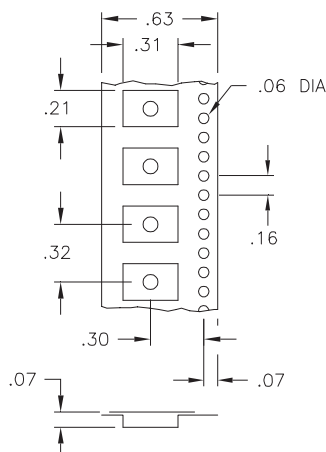
Package Outline: XL-1C



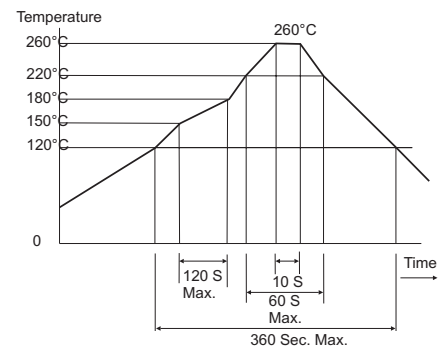
Tape and Reel



MEETS EIA-418A and
EIAJ-1009B
2000/reel Maximum



Solder Profile



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