



M1002S366 HC-49U Crystal Resonator

FEATURES

Resistance Weld (HC49U)
AT-Cut Fundamental
Rugged Design to support harsh environments

APPLICATIONS

Avionics and Aerospace
Communication and Navigation
Military Radios
Instrumentation and Industrial
Test and Measurement Equipment

ELECTRICAL SPECIFICATIONS

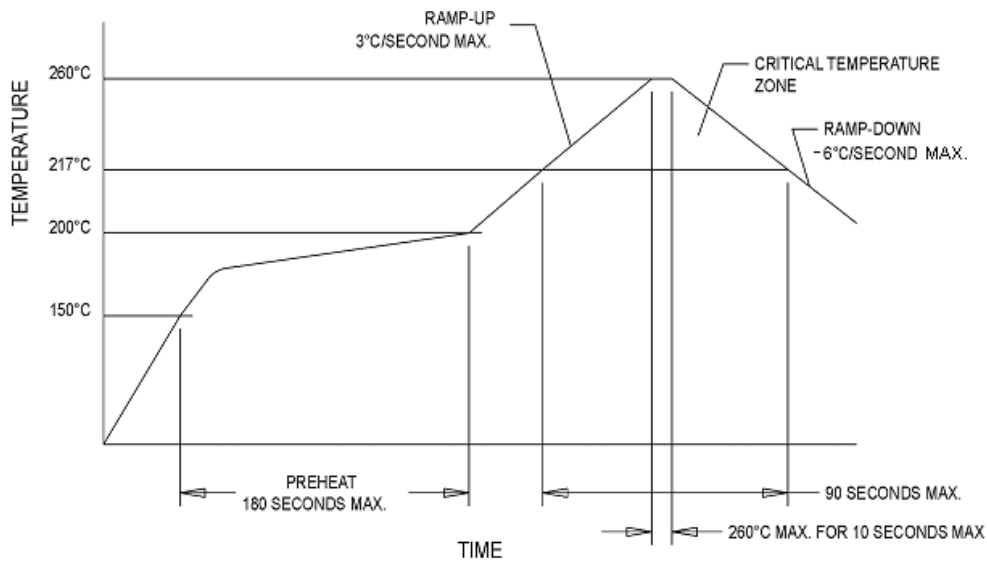
Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Mode of Oscillation		Fundamental (AT-cut)				
Frequency Range	F ₀		3.200000		MHz	
Frequency Tolerance	F/F	-50		+50	ppm	@ +25°C
Frequency Stability	ΔF/F	-50		+50	ppm	Over the operating temperature range
Aging		-5		+5	ppm	For first 30 days of operation.
Load Capacitance	C _L		32		pF	
Shunt Capacitance	C ₀			7	pF	
ESR				200	Ω	Over the operating temperature range
Insulation Resistance	I _R	500			MΩ	100 VDC
Drive Level	D _L	800	1000	1200	μW	
Unwanted Modes		Crystal units shall have no unwanted modes of oscillation within 20% of the specified frequency, no abrupt frequency shifts, and no intermittent oscillations.				

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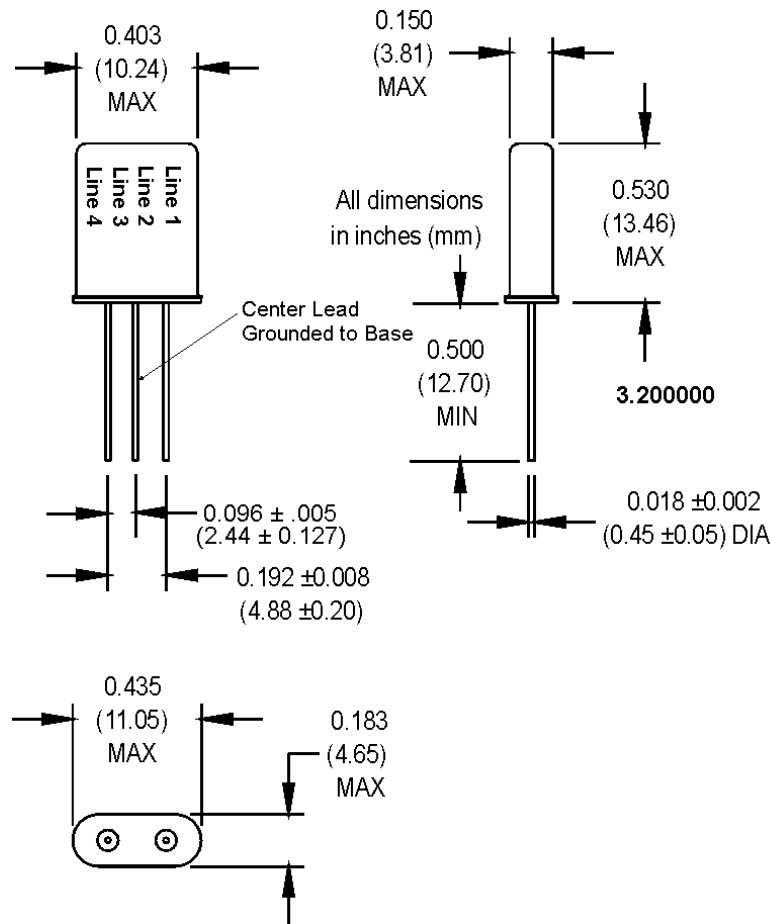
ENVIRONMENTAL CONDITIONS

Operating Temperature	T _A	-55		+90	°C	
Storage Temperature	T _s	-55		+125	°C	
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave) ± 5 ppm max frequency shift. ± 15 % max. ESR shift.					
Mechanical Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz) ± 5 ppm max frequency shift. ± 15 % max. ESR shift.					
Hermeticity	MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/sec min)					
Moisture Resistance	Per MIL-STD-202, Method 106					
Solderability	Per MIL-STD-202, Method 208C					
Package	HC-49U resistance weld with 3-lead base. Tinned leads.					

LEAD FREE SOLDER PROFILE



MECHANICAL AND PIN OUT INFORMATION



MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice.
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