M1002S223
HC-49U Crystal Resonator

FEATURES

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

APPLICATIONS

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

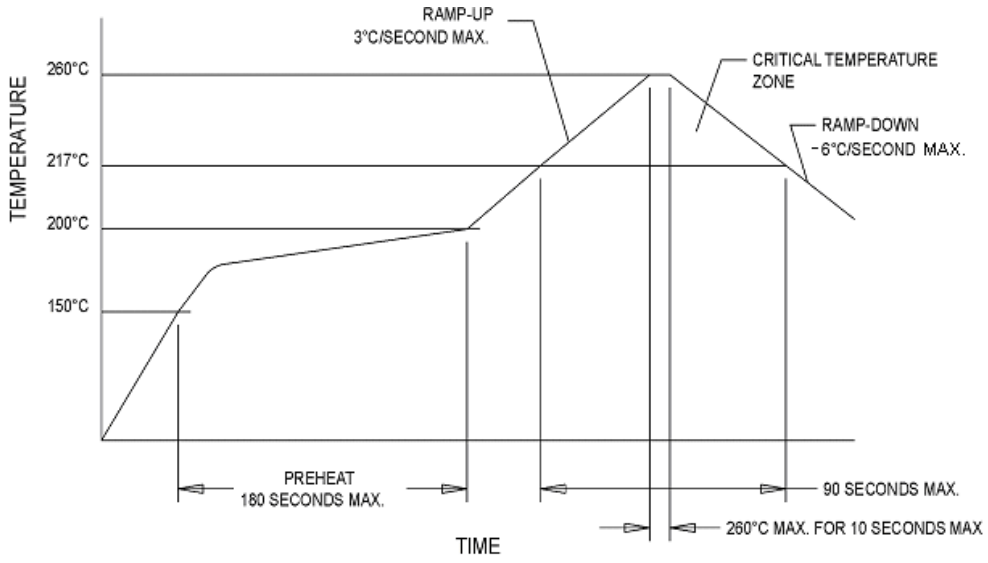
ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Mode of Oscillation			Fundamental (AT-cut)			
Frequency Range	F_0		16.666600		MHz	
Frequency Tolerance	F/F	-20		+20	ppm	@ +25°C
Frequency Stability	$\Delta F/F$	-30		+30	ppm	Over the operating temperature range
Aging		-5		+5	ppm	1st year
Load Capacitance	C_L		14		pF	
Motional Capacitance	C_1	14.4	18	21.6	pF	
Shunt Capacitance	C_0			7	pF	
C_0/C_1 Ratio		180		250		
Spurious Response		3			dB	
SPUR Test		9998				49.992300 MHz to 50.014800 MHz 10 dBm, 12 steps
SPRR Ratio		3:1				49.949800 MHz to 50.049800 MHz 10 dBm, 50 steps
ESR				25	Ω	@ +25°C
Insulation Resistance	I_R	500			MΩ	100 VDC
Drive Level	D_L	25	100	2000	μW	

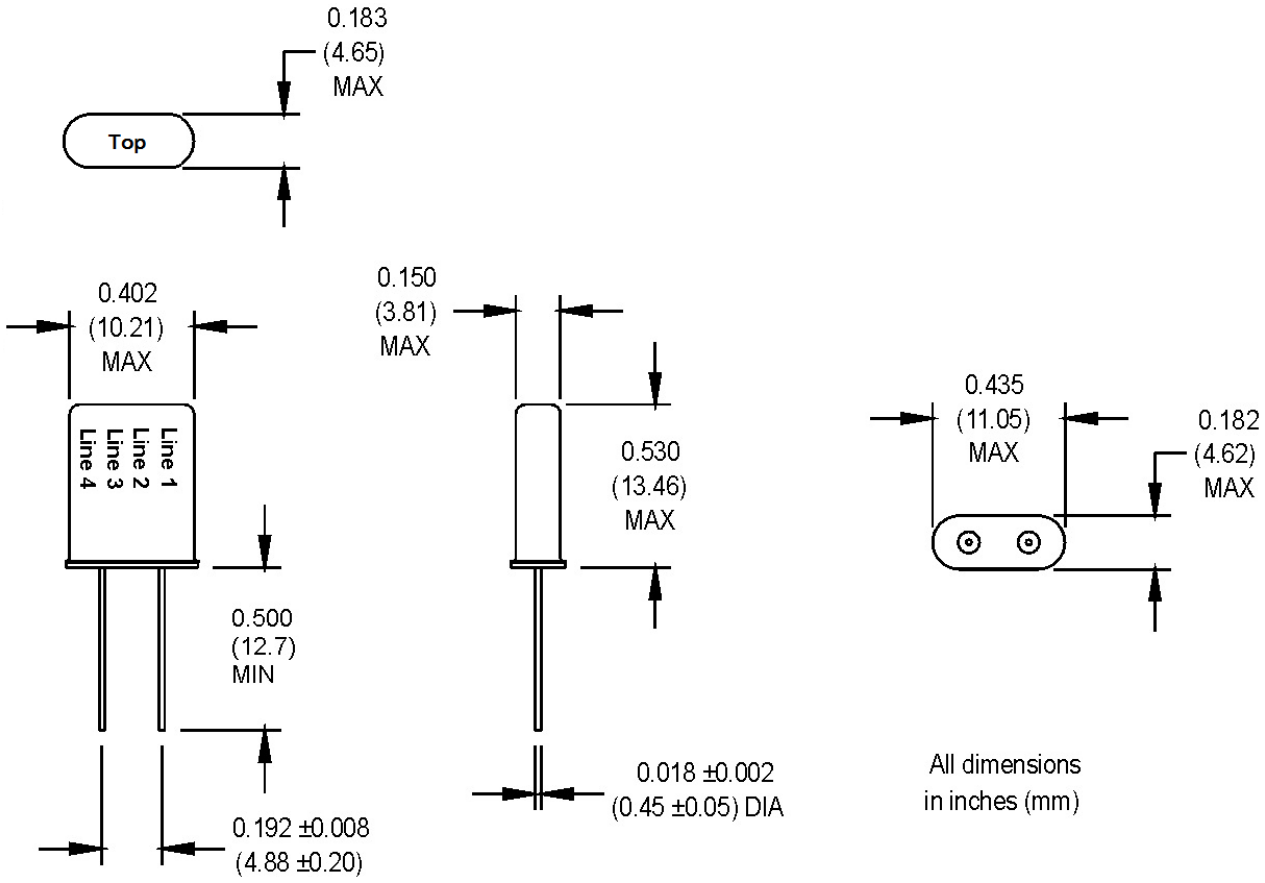
ENVIRONMENTAL CONDITIONS

Operating Temperature	T_A	-40		+85	°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)					
Mechanical Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
Hermeticity	MIL-STD-202, Method 112 (1 x 10-8 atm cc/sec min)					
Solderability	Per MIL-STD-202, Method 208C					
Package	HC-49U resistance weld RoHS compliant					
Maximum Wave Soldering Conditions	+260°C for 10 seconds					

LEAD FREE SOLDER PROFILE



MECHANICAL AND PIN OUT INFORMATION



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