

## SPECIFICATION FOR RoHS 6 COMPLIANT HC-49U/S-SMD CRYSTAL MtronPTI P/N M1001S554

### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Mode of Oscillation		Fundamental (AT-Cut)				
Frequency	F <sub>O</sub>		25.000000		MHz	Nominal Center Frequency
Frequency Tolerance	F/F	-20		+20	ppm	@ +25°C
Frequency Stability	ΔF/F	-50		+50	ppm	Over operating temp range
Operating Temperature	T <sub>A</sub>	-20		+70	°C	
Storage Temperature	T <sub>S</sub>	-55		+125	°C	
Aging	F <sub>A</sub>			±5	ppm/yr	@ +25°C ± 3°C
Load Capacitance	C <sub>L</sub>		18		pF	Parallel Resonant
Shunt Capacitance	C <sub>O</sub>			7	pF	
ESR				40	Ω	@ +25°C
Insulation Resistance		500			MΩ	@ DC100V±15V
Spurious Responses				-3	dB	
Drive Level	D <sub>L</sub>	25	100	1000	μW	

### Environmental & Mechanical Requirements:

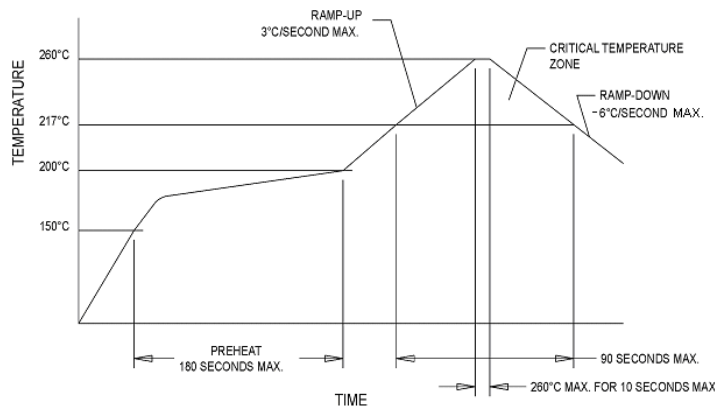
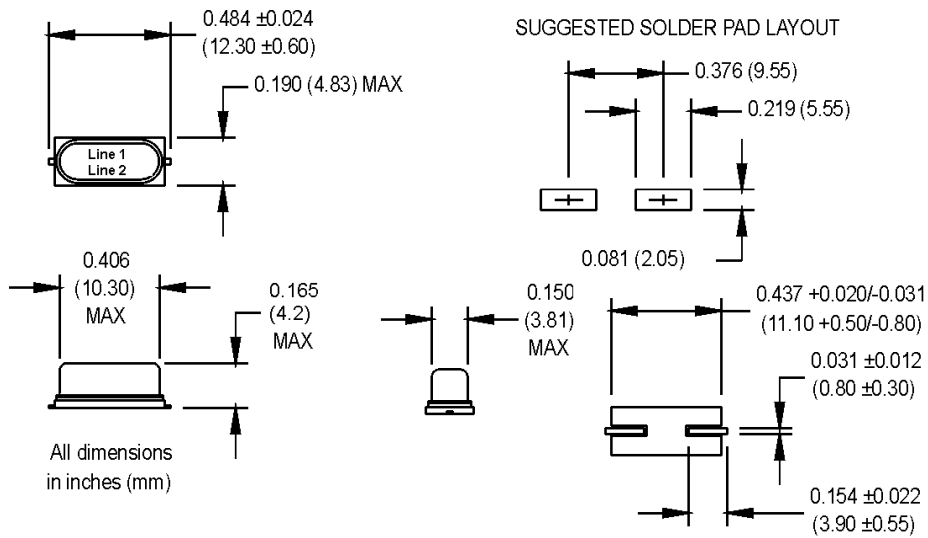
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C.
Vibration	Per MIL-STD-202, Methods 201 & 204
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B
Gross Leak	Per MIL-STD-202, Method 112 (30 sec. Immersion)
Fine Leak	Per MIL-STD-202, Method 112 (1 x 10 <sup>-8</sup> atm cc/s of Helium)
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See Figure 1
Package Type	2-pad HC-49U/S-SMD, 4.2mm height, resistance weld, ATSM-49 type
RoHS	Full RoHS Compliance

**SPECIFICATION FOR RoHS 6 COMPLIANT HC-49U/S-SMD CRYSTAL**  
**MtronPTI P/N M1001S554**

**Dimensions, Marking, and Pin Out Information:**

Part Marking	
Line 1	MFFFFVXY
Line 2	M1001S554

Legend	
M	MtronPTI
F	Frequency
V	Vendor code
X	Month
Y	Year



**Figure 1**

**Data Sheet Revision Table:**

Date	Rev.	Author	Details of Revision
10/22/12	0	HHG	Original release.
01/14/15	A	MM	Added customer PN.