

SPECIFICATION FOR LOW-ESR HC-49U/S-SMD CRYSTAL MtronPTI P/N M1001S445

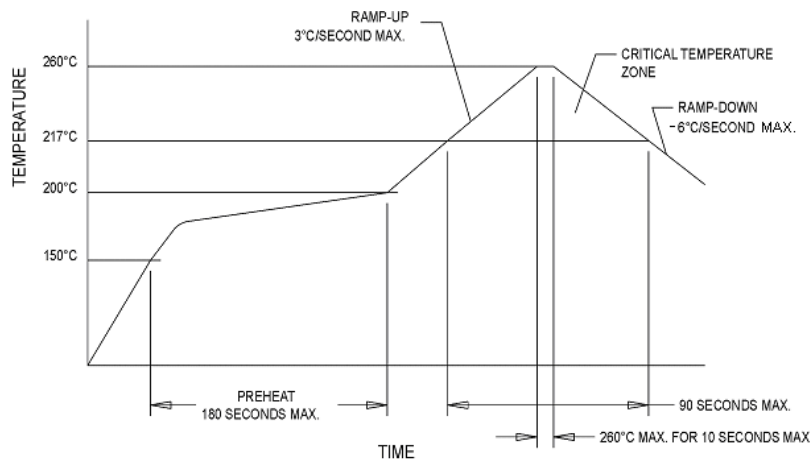
Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Mode of Oscillation		3 rd Overtone (AT-Cut)				
Frequency	F _o		50.000000		MHz	
Frequency Tolerance	F/F	-15		+15	ppm	@ +25°C
Frequency Stability	ΔF/F	-20		+20	ppm	
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-55		+125	°C	
Aging		-3		+3	ppm	Per year
Load Capacitance	C _L		10		pF	
Shunt Capacitance	C _o			7	pF	
ESR				40	Ω	
Drive Level	D _L	10	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
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/s of Helium)
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See Figure 1
Package Type	2-pad HC-49U/S-SMD resistance weld. 4.2 mm max. height. RoHS compliant.

Figure 1

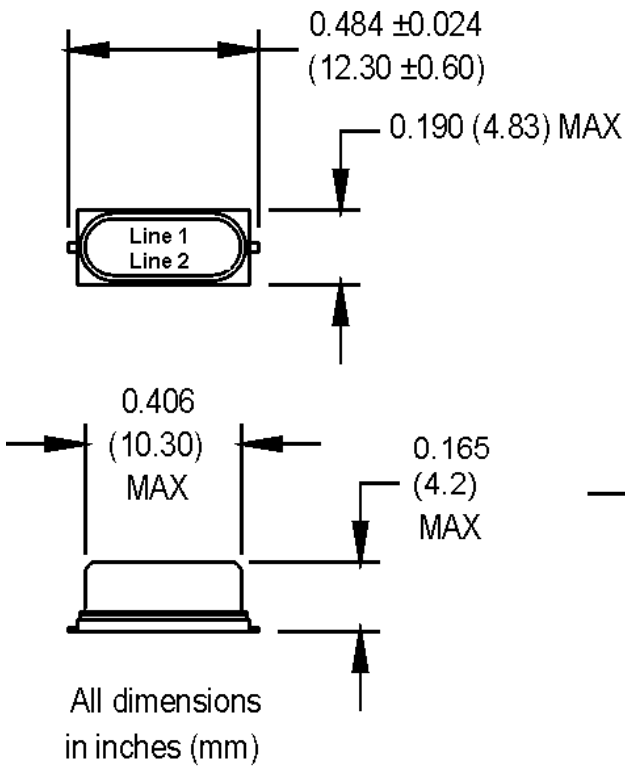


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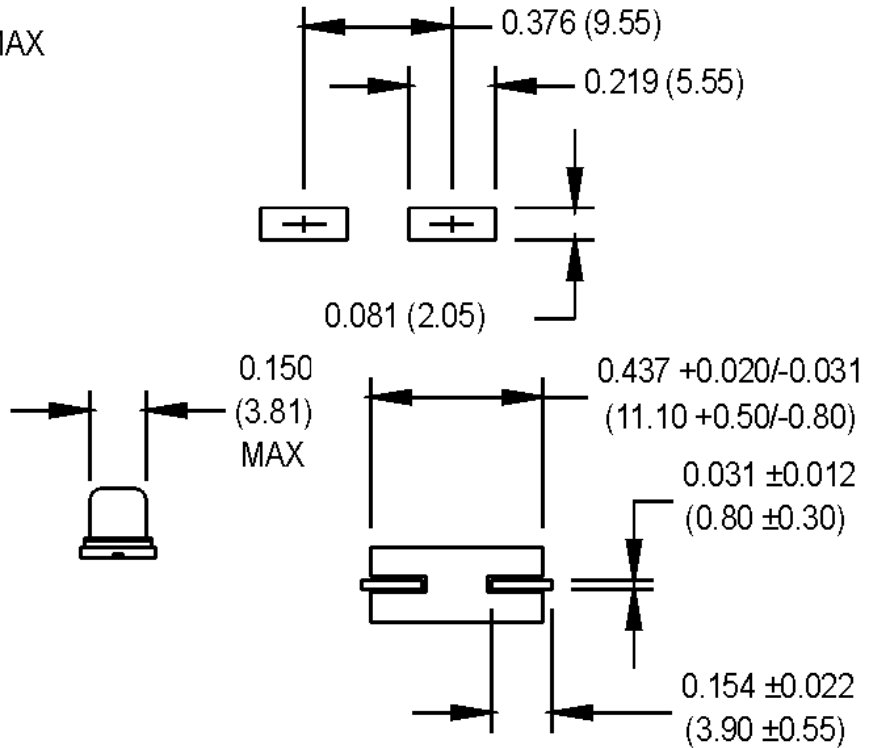
Dimensions, Marking, and Pin Out Information:

Part Marking	
Line 1	MFFFFVXY
Line 2	M1001S445

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



SUGGESTED SOLDER PAD LAYOUT



DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
2/9/10	0	WNJ	Original release.
02/04/15	A	MM	Updated package dimensions.