



SPECIFICATION FOR RoHS 6 COMPLIANT SMD CRYSTAL
MtronPTI P/N: M1003S103

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Mode of Oscillation		Fundamental (AT-Cut)				
Frequency	F _o		10.368000		MHz	Nominal Center Frequency
Frequency Tolerance	F/F	-10		+10	ppm	@ 25°C
Frequency Stability	ΔF/F	-10		+10	ppm	Operating temperature -20 °C to +70 °C
Operating Temperature	T _A	-20		+70	°C	
Storage Temperature	T _S	-55		+125	°C	
Aging		-2		+2	ppm	First year
Load Capacitance	C _L		9		pF	
Shunt Capacitance	C _o			5	pF	
ESR				37	Ω	
Insulation Resistance		500			MΩ	@ DC100V
Drive Level	D _L	10	50	100	μW	

Environmental Conditions:

Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)
Thermal Cycle	Per MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min. dwell, 10 cycles)
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/s of Helium)
Solderability	Per EIAJ-STD-002
Package Type	3.5 x 6 mm 4- pad leadless surface mount – RoHS Compliant (PP type)
Max. Soldering Conditions	See solder profile, Figure 1

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Mechanical, Marking and Layout Information:

Part Marking	
Line 1	10M3680
Line 2	M yy ww vv

Legend	
M	MtronPTI
yy	Last two digits of year
ww	Week number
vv	Factory code

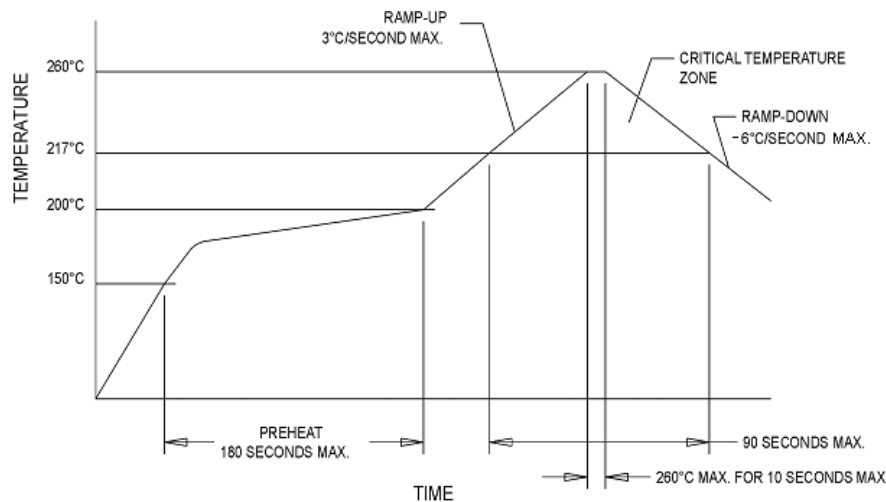
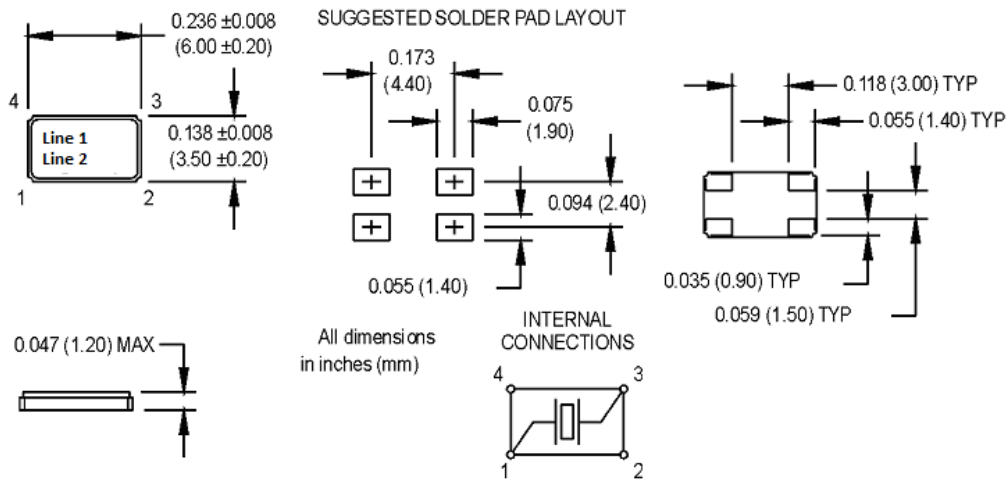


Figure 1

Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
01/23/18	0	DCO	Original release
01/31/18	A	DCO	Revised wording of conditions for frequency stability specification; corrected part number in heading.
03/07/18	B	DCO	Revised aging from ±3 ppm max. first year to ±2 ppm max. first year.