

SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS SMT VCXO MtronPTI P/N M3006S275

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Technology		fundamental mode crystal				
Frequency of Operation	F _O		61.440000		MHz	
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-55		+125	°C	
Operating Voltage	V _{CC}	2.97	3.3	3.63	V	
Operating Current	I _{CC}			25	mA	
Output Type		HCMOS / TTL Compatible				
Output Load		15 pF HCMOS				
Symmetry (duty cycle)	T _{DC}	45		55	%	Ref. to ½ V _{DD}
Logic Level "1"		90% V _{DD}			V	
Logic Level "0"				10% V _{DD}	V	
Rise/Fall Time	T _R /T _F			3	nS	From 20% to 80% V _{DD}
Tristate Function		Logic "1" (80% V _{DD} min) or N/C				Pad 2: Output Enabled
		Logic "0" (20% V _{DD} max)				Pad 2: Output Disabled
Absolute Pull Range	APR	±50			ppm	Referenced to 61.440 MHz, over operating temperature range, power supply change, and aging
Control Voltage		0.3	1.65	3.0	V	Pad 1
Modulation Bandwidth	fm	10			kHz	- 3 dB
Phase Noise			-55		dBc/Hz	@ 10 Hz
			-85		dBc/Hz	@ 100 Hz
			-115		dBc/Hz	@ 1 kHz
			-142		dBc/Hz	@ 10 kHz
			-148		dBc/Hz	@ 100 kHz
			-151		dBc/Hz	@ 1 MHz

Environmental & Packaging Requirements:

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-202, Method 107, (-55°C to 125°C, 15 min. dwell, 1000 cycles)
Life Test	Per MIL-STD-202, Method 108, 1000 hrs. operation @ +85 °C.
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 solder profile, Figure 1. +260 °C for 10 s.
Package Type	5 X 7 mm 6-pad leadless ceramic. RoHS compliant.

PIN FUNCTIONS, OUTLINE DRAWING, AND MARKING:

SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS SMT VCXO MtronPTI P/N M3006S275

Pad	Function
1	Control Voltage
2	Tristate
3	Ground
4	Output
5	No Connection
6	+V _{DD}

Part Marking	
Line 1	M3006S275
Line 2	61M4400
Line 3	M yy ww vv

Legend	
yy	Year
ww	Work week
vv	Factory code

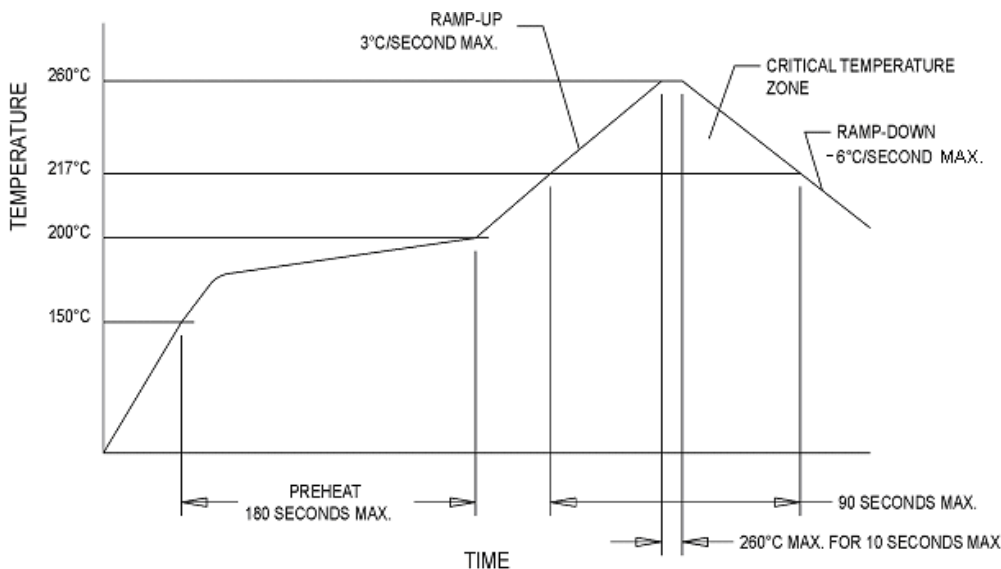
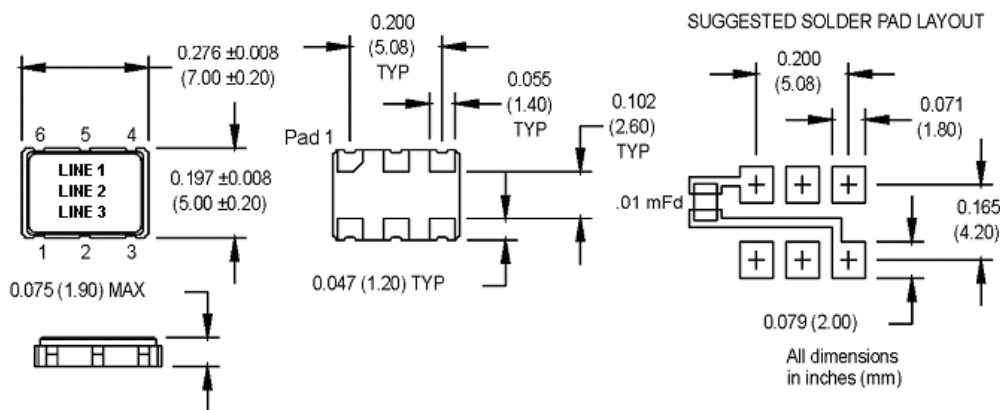


Figure 2

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
9/18/12	0	MM	Original release.