

SPECIFICATION FOR RoHS 6 COMPLIANT ACMOS SMT VCXO MtronPTI P/N M3006S277

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		32.768000		MHz	
Frequency Stability	ΔF/F	-40		+40	ppm	Over Operating Temperature and Initial Accuracy @ +25 °C
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _{STG}	-55		+125	°C	
Operating Voltage	V _{DD}	3.135	3.3	3.465	V	
Operating Current	I _{DD}			8	mA	
Output Type		ACMOS				
Output Load		15 pF				
Symmetry (duty cycle)	t _{DC}	45		55	%	Ref. to ½ V _{DD}
Logic "1" Level		90			% V _{DD}	
Logic "0" Level				10	% V _{DD}	
Rise/Fall Time	t _R /t _F			10	ns	From 10% to 90% V _{DD}
Tristate Function						
Logic "1" Level		80% V _{DD} or N/C				Pad 2: Output Enabled
Logic "0" Level				20% V _{DD}		Pad 2: Output Disabled
Absolute Pull Range	APR	±30			ppm	Referenced to 32.768 MHz, over operating temperature range, power supply change, and aging
Control Voltage	V _{CT}	0.5		2.8	V	Pad 1
Differential Sensitivity		±70			ppm/V	
Linearity				20	%	
Pulling Slope		Positive				
Phase Jitter	ΦJ			1	ps RMS	Integrated 12 kHz - 20 MHz
Period Jitter	DJ		4	10	ps RMS	1-Sigma

Environmental & Packaging Requirements:

Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g, 6 ms duration, ½ sine wave)
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g from 10Hz to 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 hours of 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 seconds
Package Type	5.0 mm x 7.0 mm x 1.9 mm 6-pad leadless ceramic. RoHS compliant.

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Pin Functions, Outline Drawing, and Marking:

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

Part Marking	
Line 1	M3006S277
Line 2	32M7680
Line 3	M yy ww vv

Legend	
yy	Year
ww	Work week
vv	Factory code

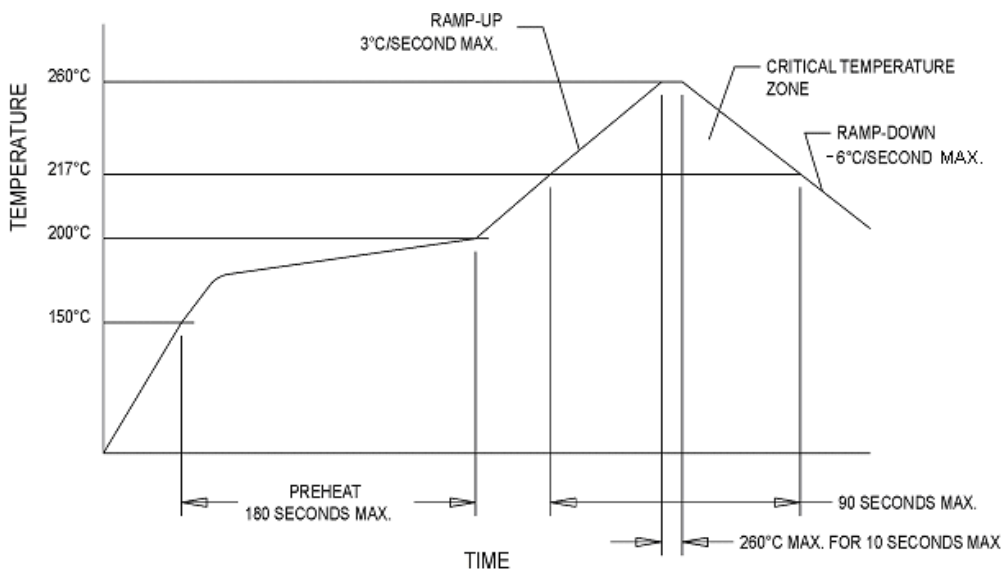
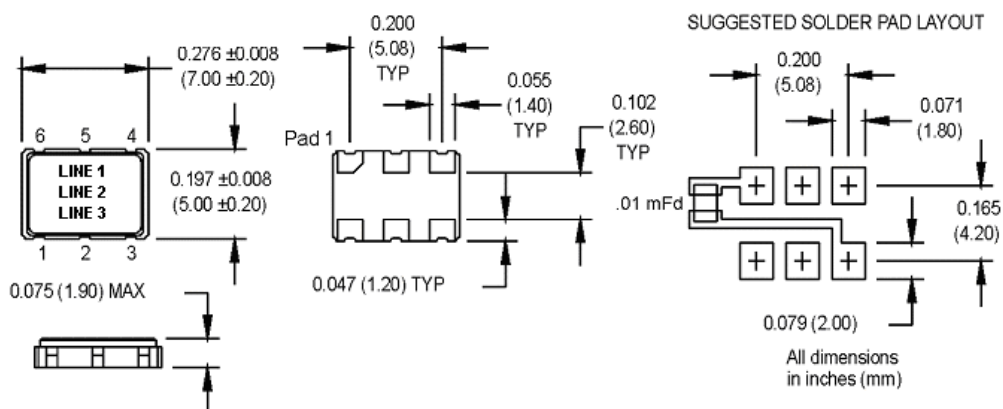


Figure 2

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
12/17/12	0	LEO	Original release.