

SPECIFICATION FOR SMT TCXO

MtronPTI P/N M6164S012

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _o		50.000000		MHz	
Frequency Stability						
Frequency Stability	ΔF/F	-10		+10	ppm	(F _{max} – F _{min})/2
Frequency Vs. Reflow		-1.0		+1.0	ppm	
Frequency Vs. Supply			± 0.02	± 0.1	ppm	For 5% supply variation
Frequency Vs. Load			± 0.02	± 0.1	ppm	For 5% load change
Output						
Output Type		HCMOS Compatible				
Output Load				15	pF	
Symmetry (duty cycle)	T _{DC}	40	50	60	%	@ 50% of VDD
Output Logic Levels	V _{OL}			20	% V _{CC}	I _{OH} /I _{OL} = ± 4 mA
Output Level	V _{OH}	80			% V _{CC}	I _{OH} /I _{OL} = ± 4 mA
Rise/Fall Time				6.5	nS	Ref. 10% and 90%
Tri-state Function		Logic “1”, or floating, output Enabled. Logic “0”, output Disabled.				Pad 8
Additional Specifications						
Start-up Time	T _{SU}			10	mS	
Phase Noise			-80		dBc/Hz	@ 10 Hz
			-108		dBc/Hz	@ 100 Hz
			-132		dBc/Hz	@ 1 kHz
			-149		dBc/Hz	@ 10 kHz
			-155		dBc/Hz	@ 100 kHz
Supply Voltage & Power Consumption						
Operating Voltage	V _{DD}	3.135	3.3	3.465	V	
Operating Current	I _{DD}			5.0	mA	

Environmental Conditions:

Operating Temperature	T _A	-55		+105	°C	
Storage Temperature	T _S	-55		+125	°C	
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sine wave)					
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
Solderability	Per EIAJ-STD-002					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	5.0 x 7.0 x 2.0mm, 10-pad Ceramic Leadless Chip Carrier. RoHS Compliant.					

