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## SPECIFICATION FOR SMT TCXO MtronPTI P/N M6131S034

### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F <sub>O</sub>		107.100000		MHz	
	Frequency Stabilities					
Overall Stability	ΔF/F	-4.0		+4.0	ppm	Includes deviation over Operating Temperature, supply voltage, load, and 10 year aging @ +25°C.
vs Temperature		-2.0		+2.0	ppm	Includes initial frequency & deviation over -55°C to +85°C
	Output					
Output Type		HCMOS Compatible				
Output Load				10    1	pF/KΩ	± 10 %
Symmetry (duty cycle)	T <sub>DC</sub>	45	50	55	%	@ 50% of VDD
Output Logic Levels	V <sub>OL</sub>			20	% V <sub>CC</sub>	
Output Level	V <sub>OH</sub>	80			% V <sub>CC</sub>	
Rise/Fall Time				3	nS	Ref. 20% and 80%
	Additional Specifications					
SSB Phase Noise (Under Static Conditions)				-65	dBc/Hz	@ 10 Hz
				-90		@ 100 Hz
				-115		@ 1 kHz
				-125		@ 10 kHz
				-130		@ 100 kHz
				-140		@ 1 MHz
	Supply Voltage & Power Consumption					
Operating Voltage	V <sub>DD</sub>	3.0	3.3	3.6	V <sub>DC</sub>	
Operating Current	I <sub>DD</sub>			30	mA	

### Environmental & Mechanical Requirements:

Operating Temperature	T <sub>A</sub>	-55		+85	°C	
Storage Temperature	T <sub>S</sub>	-65		+125	°C	
Mechanical Shock	Per DO-160 (TBD)					
Vibration	Per DO-160 (TBD)					
Thermal Cycle	Per MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min. dwell, 10 cycles)					
Solderability	Per EIAJ-STD-002					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	4-Pad FR-4 non-hermetically sealed,					
Pad Termination	ENIG over Cu					

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### Mechanical, Marking and Layout Information:

Pad	Function
1	No Connect
2	Ground
3	Output
4	+V <sub>DD</sub>

Part Marking	
Line 1	M6131S034
Line 2	107M1000
Line 3	MtronPTI (yyww)

Legend	
yy	Year
ww	Week

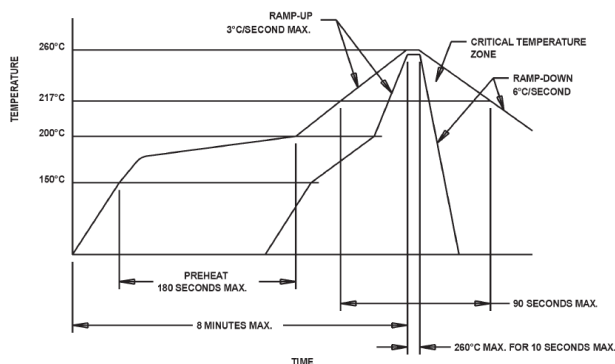
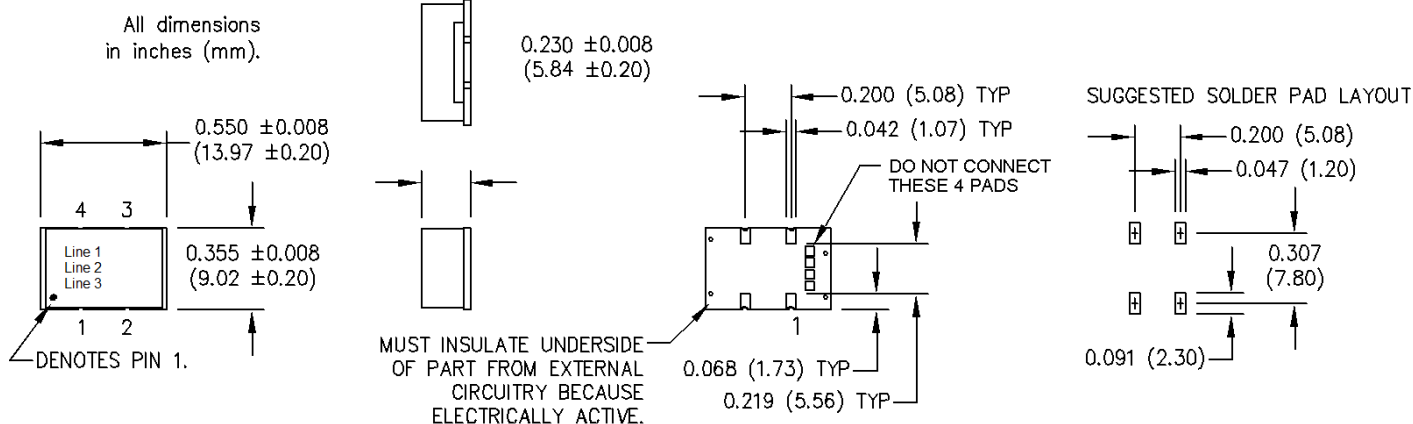


Figure 1

### Data Sheet Revision Table:

Date	Rev.	Author	Details of Revision
2/4/19	0	BRR	Original Release.
2/5/19	A	MM	Updated device height.
02/11/19	B	MM	Updated stability and rise/fall time specifications.
02/18/19	C	MM	Updated overall stability specification.