

## SPECIFICATION FOR RoHS 6 COMPLIANT SMT VCTCXO

### MtronPTI P/N: M6030S070

#### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency	F <sub>0</sub>		50.000000		MHz	
Frequency Tolerance		-1.5		+1.5	ppm	@ +25°C
<b>Frequency Stability</b>						
vs. Operating Temp. Range	ΔF/F			1.5	ppm	(F <sub>max.</sub> - F <sub>min.</sub> )/2
vs. Aging		-1.0		+1.0	ppm	Per year @ 25°C
<b>RF Output</b>						
Output Type		Clipped Sine Wave				
Output Load		10 KΩ    10 pF				
Output Amplitude		0.8			V <sub>pk-pk</sub>	
<b>Frequency Adjustment</b>						
Tuning Voltage Range	V <sub>C</sub>	0.30	1.65	3.00	V	Pad 1
Tuning Range		±7			ppm	Referenced to frequency with V <sub>C</sub> = 1.65
Start-Up Time				10	ms	
<b>Additional Specifications</b>						
SSB Phase Noise (Under Static Conditions)				-145	dBc/Hz	@ 10kHz Offset
<b>Supply Voltage &amp; Power Consumption</b>						
Operating Voltage	V <sub>DD</sub>	3.135	3.300	3.465	V	
Operating Current	I <sub>DD</sub>			5	mA	

#### Environmental Conditions:

Operating Temperature	T <sub>A</sub>	-40		+70	°C	
Storage Temperature	T <sub>S</sub>	-55		+125	°C	
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 20-2000 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 <sup>-8</sup> atm cc/s of Helium) (Crystal Only)					
Solderability	Per EIAJ-STD-002					
Reflow Soldering Conditions	See solder profile, Figure 1					

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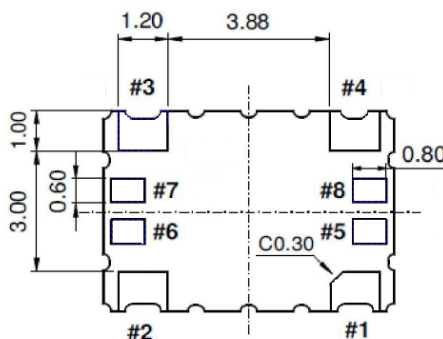
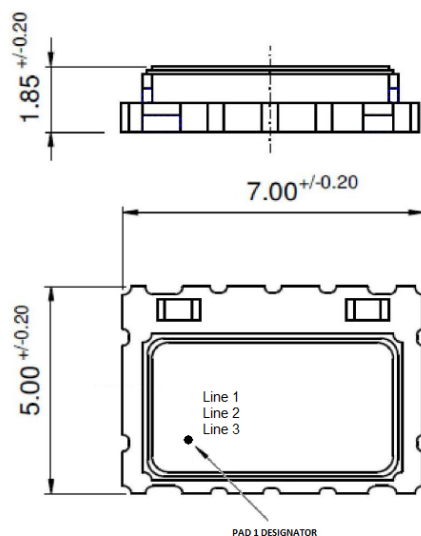
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#### Dimensions, Marking and Pin-Out Information:

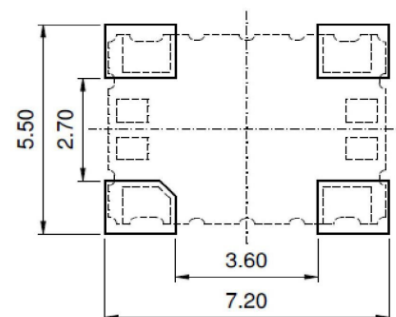
Part Marking	
Line 1	M6030S070
Line 2	50M000
Line 3	M yywwvv

Legend	
yy	Year
ww	Work week
vv	Factory code

Pad	Function
1	Tuning Voltage
2	Ground
3	Output
4	+V <sub>DD</sub>
5-8	Do Not Connect



**SUGGESTED SOLDER LAYOUT**



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#### Soldering Conditions:

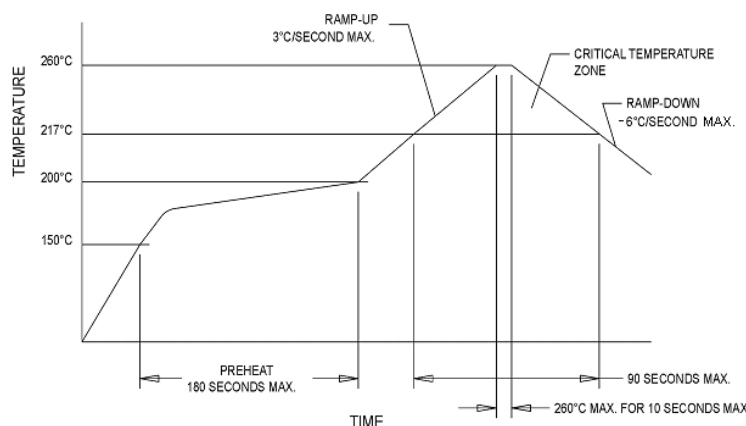
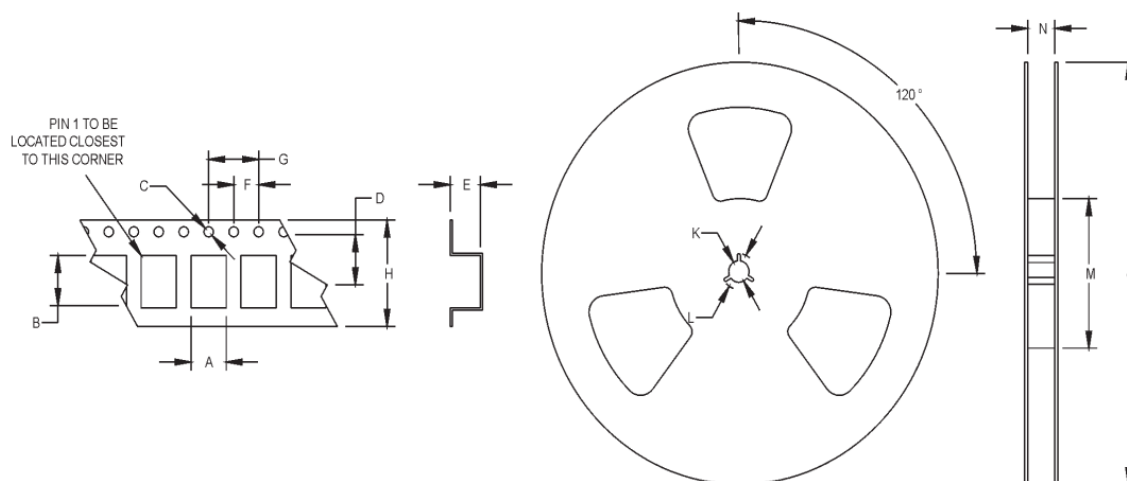


Figure 1

#### Tape and Reel Specifications:

All units in mm



Tape and Reel Specifications												
A	B	C	D	E	F	G	H	J	K	L	M	N
5.4	7.4	1.5	7.5	2.1	4	8	16	180	13.5	24.8	80	16.5

#### Data Sheet Revision Table

Date	Rev.	Orig.	Details of Revision
11/01/18	0	MM	Original release.