

## ELECTRICAL SPECIFICATIONS

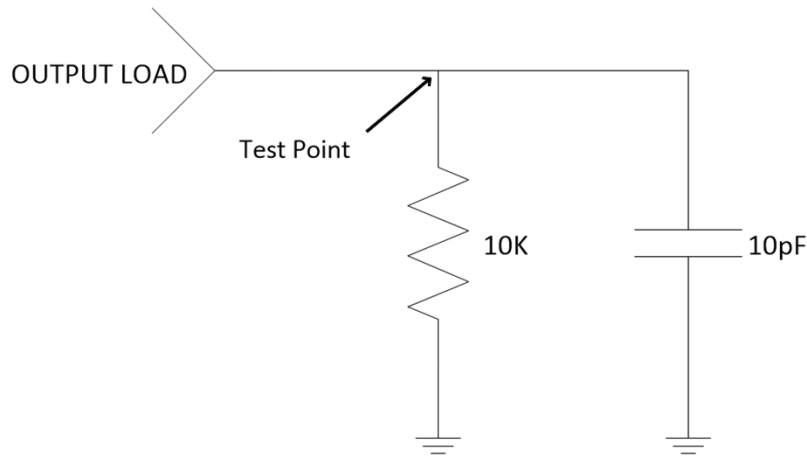
Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency	F <sub>0</sub>	21.000000			MHz	
<b>Frequency Stabilities</b>						
Initial Accuracy		-1.0		+1.0	ppm	@ +25°C
vs. Operating Temperature	ΔF/F	-1.0		+1.0	ppm	(F <sub>MAX</sub> -F <sub>MIN</sub> )/2
vs. Reflow		-1		+1	ppm	
vs. Supply Voltage			±0.02	±0.1	ppm	5% voltage variation
vs. Load			±0.02	±0.1	ppm	5% load variation
vs. Aging		-1.0		+1.0	ppm	1 <sup>st</sup> Year
		-3.0		+3.0	ppm	10 years
<b>RF Output</b>						
Output Type		Clipped Sinewave				
Output Logic Level		1.0			V <sub>pk-pk</sub>	
Output Load			10  10		kΩ  pF	Refer to the load circuit diagram
Tristate Function		70%V <sub>CC</sub> or Open			V	Output Enabled
				30%V <sub>CC</sub>	V	Output Disabled: to HIGH Impedance (Z)
Tristate Leakage Current		-100		+100	μA	
Input Leakage Current		-50		+50	μA	
Start-up Time	T <sub>SU</sub>			10	ms	
<b>Frequency Adjustment</b>						
Control Voltage Range	V <sub>c</sub>	0.3		3.0	V	
Tuning Range		±9.2			ppm	
Linearity				3	%	
Modulation Bandwidth		2			kHz	
Input Resistance		100			kΩ	
<b>Phase Noise</b>						
SSB Phase Noise (measured @ 26 MHz)			-98		dBc/Hz	@ 10Hz Offset
			-127		dBc/Hz	@ 100Hz Offset
			-148		dBc/Hz	@ 1kHz Offset
			-156		dBc/Hz	@ 10kHz Offset
<b>Operating Voltage and Current</b>						
Operating Voltage	V <sub>CC</sub>	3.135	3.300	3.465	V	
Operating Current	I <sub>c</sub>			3.0	mA	
<b>Temperature</b>						
Operating Temperature		-40		+85	°C	
Storage Temperature		-55		+125	°C	

## ENVIRONMENTAL CONDITIONS

Shock	Per MIL-STD-202, Method 213, Condition C
Vibration	Per MIL-STD-202, Methods 201 & 204
Solderability	Per EIAJ-STD-002
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 <sup>-8</sup> atm cc/s of helium)
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B

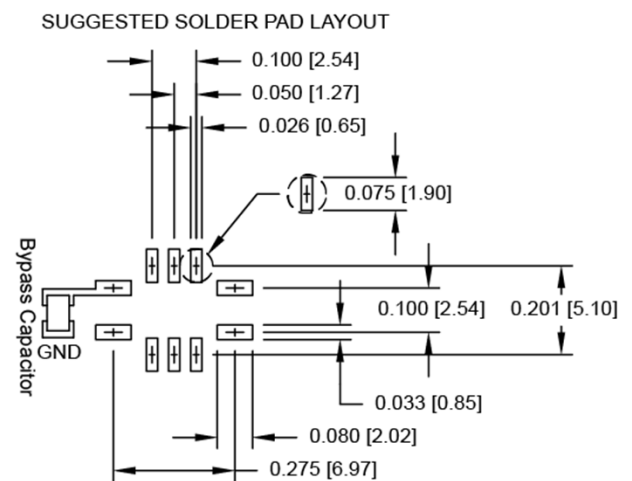
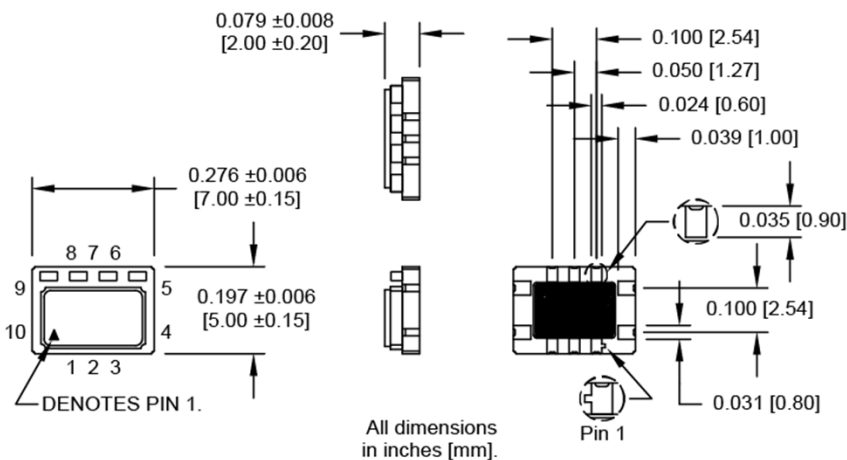
# LOAD CIRCUIT DIAGRAMS

Load Circuit #7 - Clipped Sinewave Output

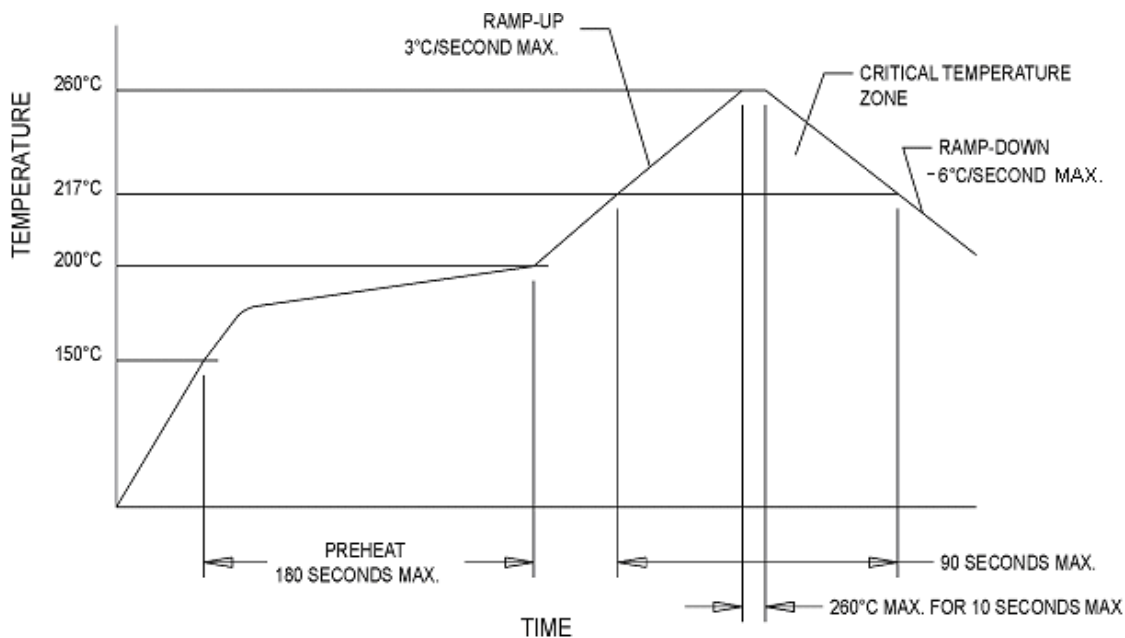


# MECHANICAL AND PIN OUT INFORMATION - Package Code N (10 Pad)

Pad	Function
1	N/C – Do Not Connect
2	N/C – Do Not Connect
3	N/C – Do Not Connect
4	Ground
5	Output
6	N/C – Do Not Connect
7	N/C – Do Not Connect
8	Tristate or N/C - Do Not Connect
9	Supply Vcc+
10	Voltage Control

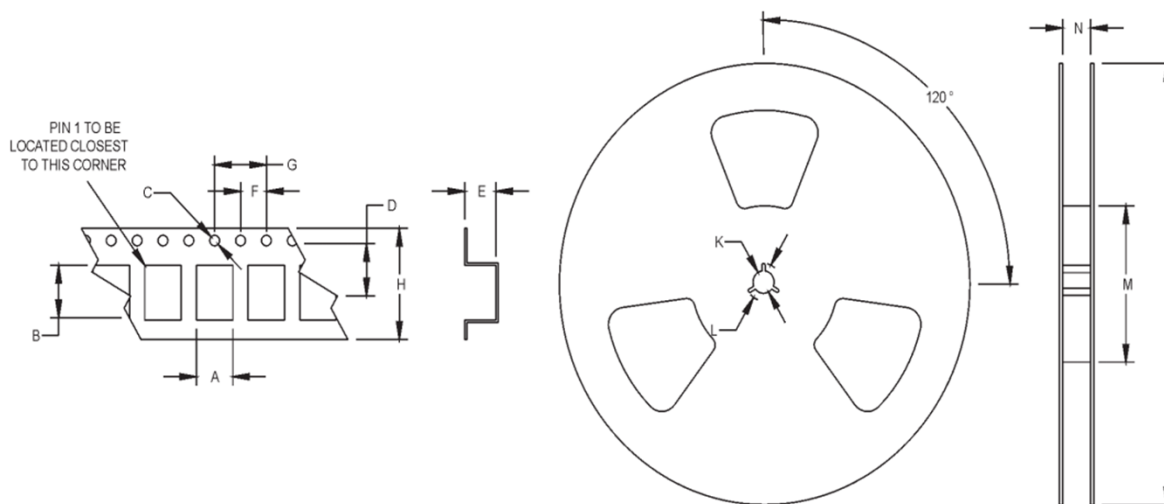


## LEAD FREE SOLDER PROFILE



## TAPE AND REEL SPECIFICATIONS

All units in mm



A	B	C	D	E	F	G	H	J	K	L	M
5.32	7.28	1.5	7.5	2.2	4	8	16	178	13.5	24.8	80

### Data Sheet Revision Table

Date	Rev	Author	Details of Revision
9/01/21	A	MM	Original Release

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice.  
No liability is assumed as a result of their use or application.