

ELECTRICAL SPECIFICATIONS

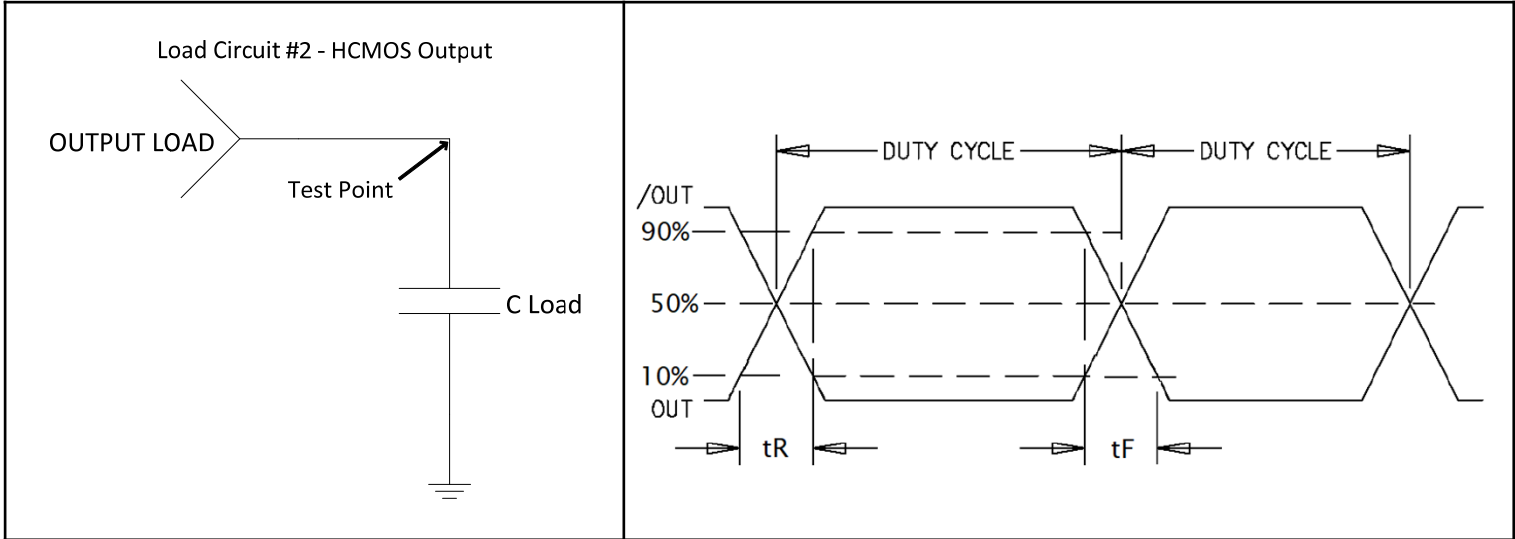
Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency	F ₀	10.000000			MHz	
Design		Must use Next Generation TCXO Design				
Crystal		Must use 20 MHz Crystal				
Frequency Stabilities						
Frequency Holdover Stability Over Temperature	ΔF/F	-0.28		+0.28	ppm	
Frequency Holdover		-0.32		+0.32	ppb	24 hrs. over operating temp.
Overall Stability		-4.6		+4.6	ppm	Includes initial calibration, operating temperature, supply voltage and load variations, shock, vibration, reflow, and 20 yr. aging at +40°C operating temperature
RF Output						
Output Type		CMOS				
Output Load			15		pF	CMOS Load Note 2
Waveform Symmetry (duty cycle)	T _{DC}	45	50	55	%	@ 50% of waveform (CMOS)
Output Logic Level (CMOS)	V _{OL}			10	%V _{CC}	V _{cc} = +3.3 V and 15pF Load
	V _{OH}	90			%V _{CC}	V _{cc} = +3.3 V and 15pF Load
Rise/Fall Time	T _R /T _F			6.5	ns	10% to 90% V _{cc}
Start-up Time	T _{SU}			10	ms	
Tristate Function		80% or Open			%V _{CC}	Output Enabled
				20	%V _{CC}	Output Disabled: to HIGH Impedance (Z)
Frequency Adjustment						
Control Voltage Range	V _c	0.3	1.65	3.0	V	
Tuning Range		±4.0			ppm	
Linearity				3	%	
Modulation Bandwidth		2			kHz	
Input Resistance		100			kΩ	
Phase Noise						
SSB Phase Noise Note 1			-98		dBc/Hz	@ 10 Hz Offset
			-125		dBc/Hz	@ 100 Hz Offset
			-145		dBc/Hz	@ 1 kHz Offset
			-153		dBc/Hz	@ 10 kHz Offset
			-154		dBc/Hz	@ 100 kHz Offset
			-156		dBc/Hz	@ 1 MHz Offset
			-158		dBc/Hz	@ 5 MHz Offset
Operating Voltage and Current						
Operating Voltage	V _{CC}	3.135	3.300	3.465	V	
Operating Current	I _C			5.0	mA	
Temperature						
Operating Temperature		-40		+85	°C	
Storage Temperature		-55		+125	°C	

Notes	
Note 1	To be verified on first article units.
Note 2	Refer to the load circuit diagram.

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 10-8 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

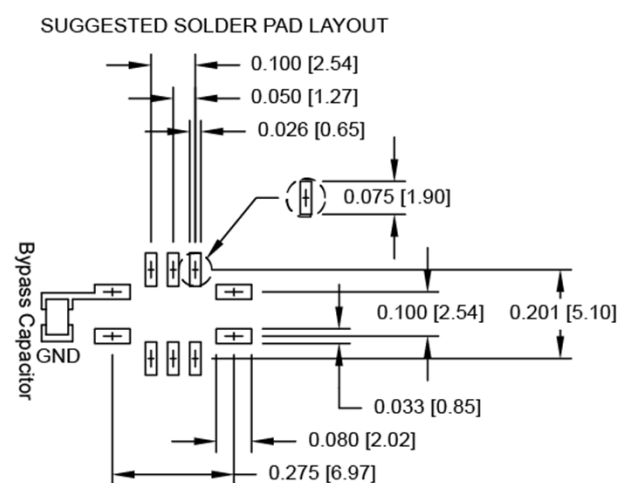
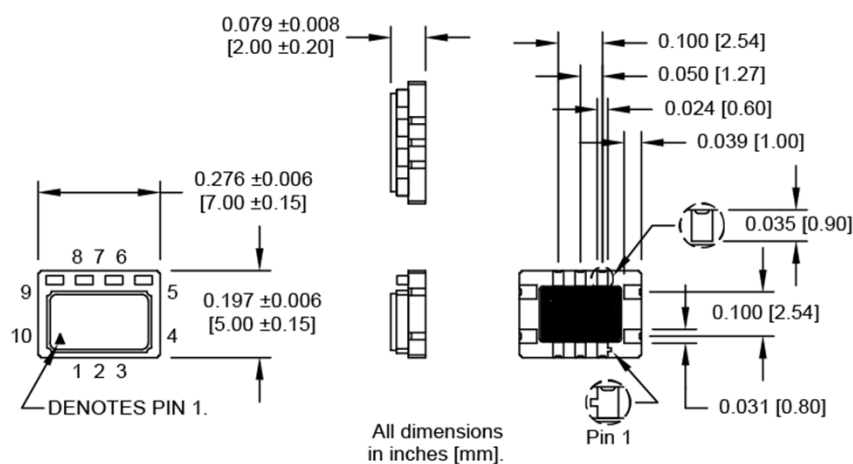


MECHANICAL AND PIN OUT INFORMATION - Package Code N (10 Pad)

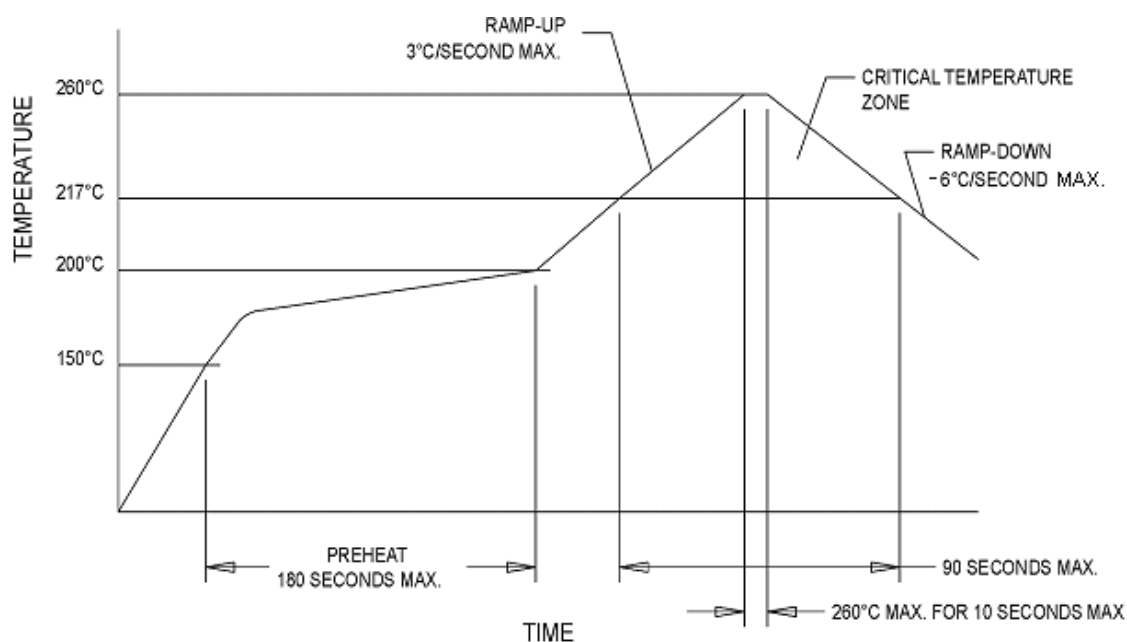
Pad	Function
1	N/C – Do Not Connect
2	N/C – Do Not Connect
3	N/C – Do Not Connect
4	Ground
5	Output
6	N/C – Do Not Connect
7	N/C – Do Not Connect
8	Tristate or N/C - Do Not Connect
9	Supply Vcc+
10	Voltage Control

Part Marking	
Line 1	
Line 2	M62ym

Legend	
y	Year
m	Month

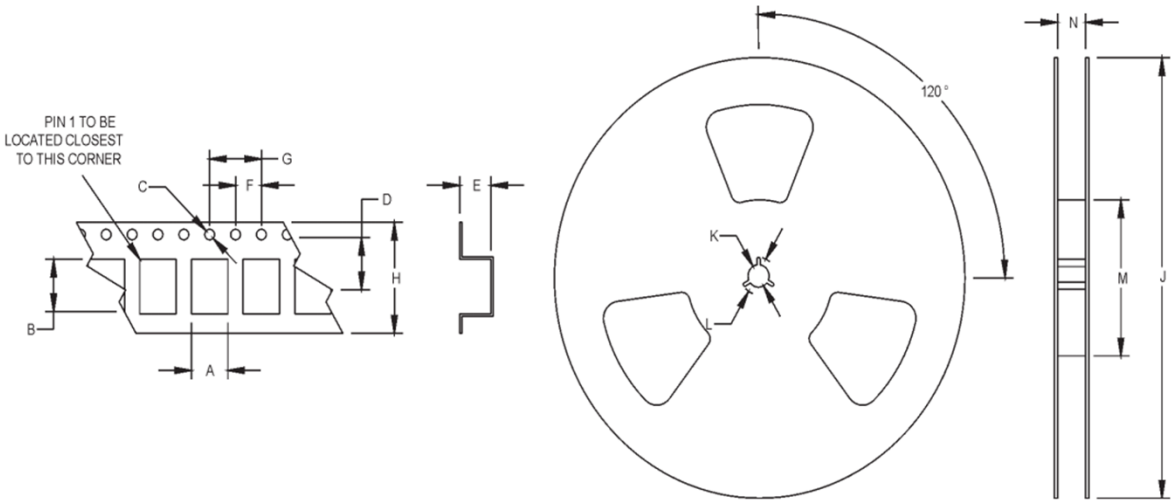


LEAD FREE SOLDER PROFILE



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
11/03/21	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.