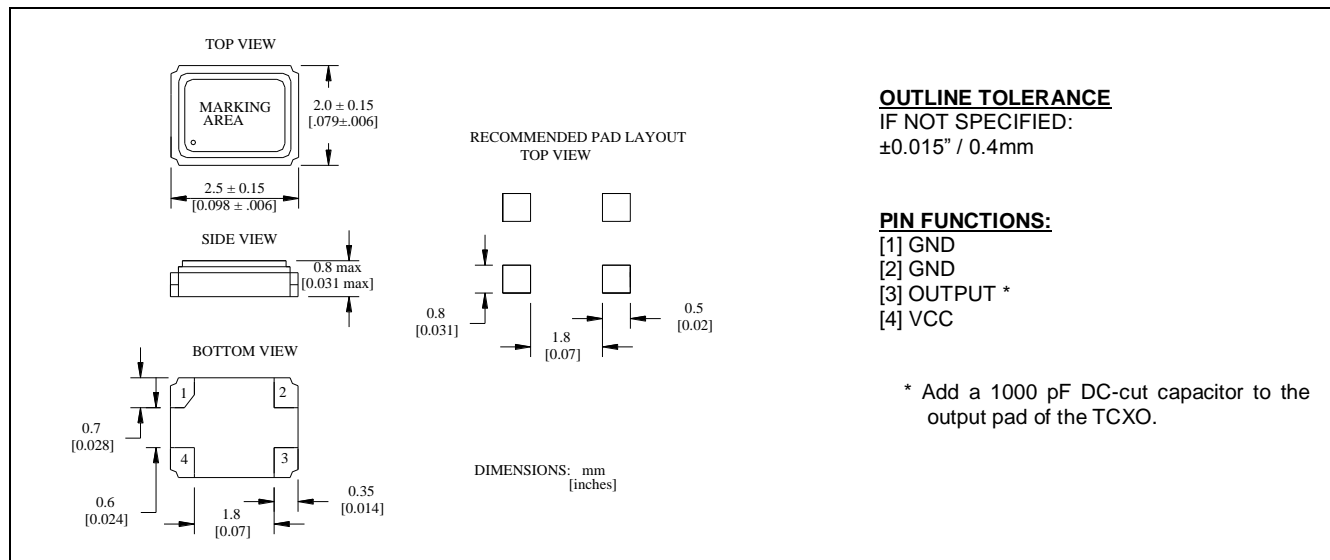


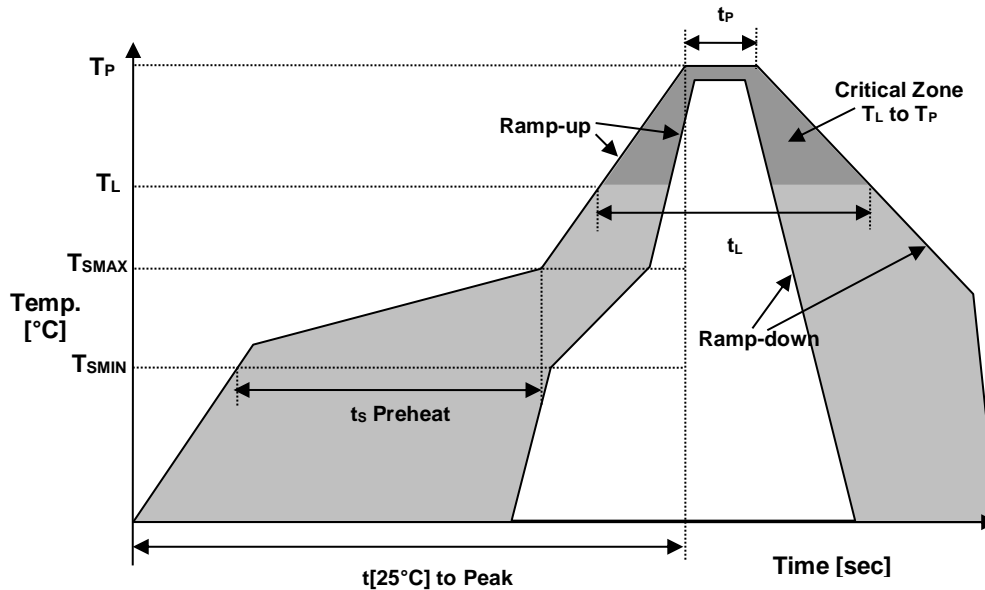
ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT	
Nominal Frequency	f_0	$V_{CC} \pm 5\%$	32.000	MHz	
Supply voltage, nom.	V_{CC}	$V_{CC} \pm 5\%$,	3.3	VDC	
Supply current, max	I_s	$V_{CC} \pm 5\%$	2.5	mA	
Operating temperature	T_a		-30 ~ +85	°C	
Storage temperature	$T(stg)$	Absolute max	-40 ~ +85	°C	
Frequency Stability	vs. Temperature	$\Delta f/f_0(T_a)$	Reference to +25°C Cover Temperature Range	±0.5	ppm
	vs. Supply Voltage	$\Delta f/f_v$	$V_{CC} \pm 5\%$	±0.1	ppm
	vs. Load	$\Delta f/f_L$	Load ±10%	±0.2	ppm
	vs. Aging Max	$\Delta f/f_0(\text{year})$	Per Year at +25°C ± 2°C	±1.0	ppm
Initial Frequency Calibration, Max	f_c	Measured at 25°C, Reference to f_0	±1.0	ppm	
Output Level, Clipped Sine Wave	-	10K Ohms // 10 pF ±10%	0.8	V_{P-P}	
Start up time, Max	t_s	$V_{OUT} \geq 90\% V_{P-P}$	2.5	ms	
Phase noise @ freq. offset, typical.	$\mathcal{L}(\Delta f)$	$\Delta f=1$ Hz	-62	dBc/Hz	
	$\mathcal{L}(\Delta f)$	$\Delta f=10$ Hz	-87	dBc/Hz	
	$\mathcal{L}(\Delta f)$	$\Delta f=100$ Hz	-112	dBc/Hz	
	$\mathcal{L}(\Delta f)$	$\Delta f=1$ KHz	-133	dBc/Hz	
	$\mathcal{L}(\Delta f)$	$\Delta f=10$ KHz	-147	dBc/Hz	
	$\mathcal{L}(\Delta f)$	$\Delta f=100$ KHz	-151	dBc/Hz	

MECHANICAL SPECIFICATION



REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T_{SMIN}	150°C
Temperature Max Preheat	T_{SMAX}	200°C
Time (T_{SMIN} to T_{SMAX})	t_s	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_p	10 sec.
Time $t_{[25^\circ\text{C}]}$ to Peak Temperature	$t_{[25^\circ\text{C}]}$ to Peak	480 sec.
Time	t_L	60-150 sec.

ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
REACH	Compliant
RoHS	Compliant
TERMINATION FINISH	Au





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MARKING

Rx32.0
•AF3yw

x - Internal Production ID code
y - Year code
w - Week code

YEAR CODE table with columns Year and Code, listing years from 2011 to 2019 and their corresponding codes 1 through 9.

ALPHA WEEK CODE TABLE with columns Week and Code, listing weeks 1 through 36 and their corresponding alpha codes from a to Z.

APPROVAL

Approval table with columns for DRAWN BY, APPROVED BY, and REVISION, listing names and dates.

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