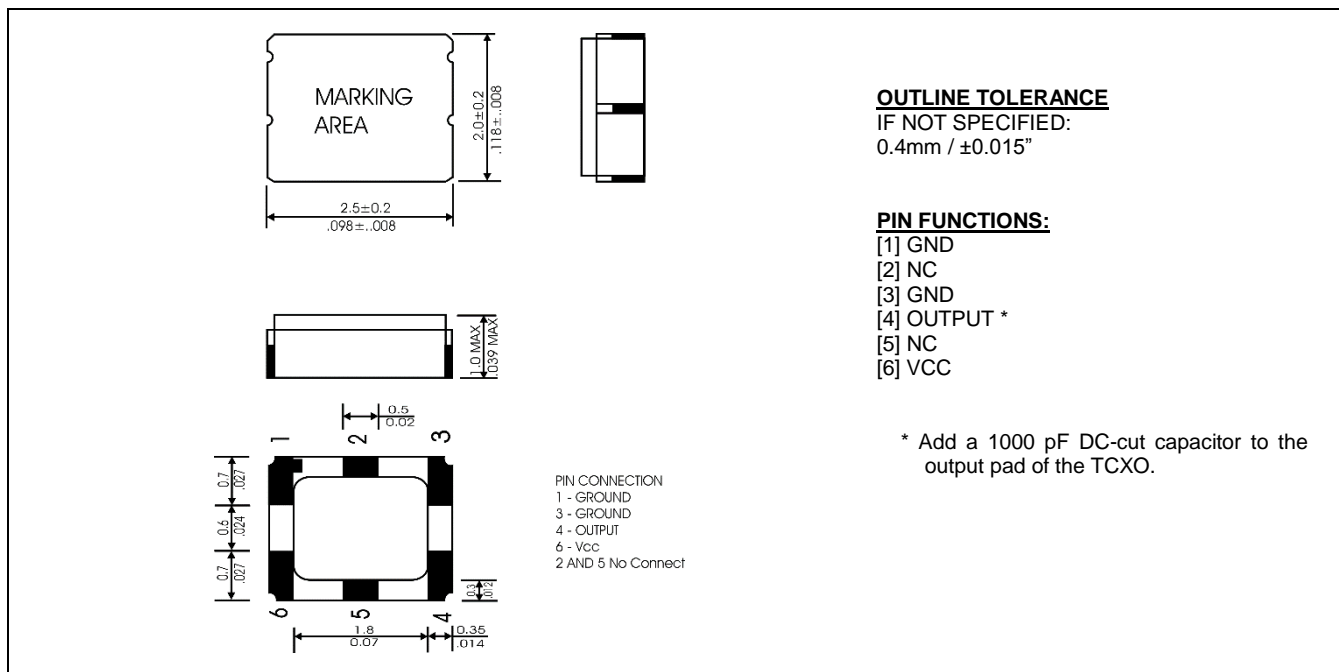


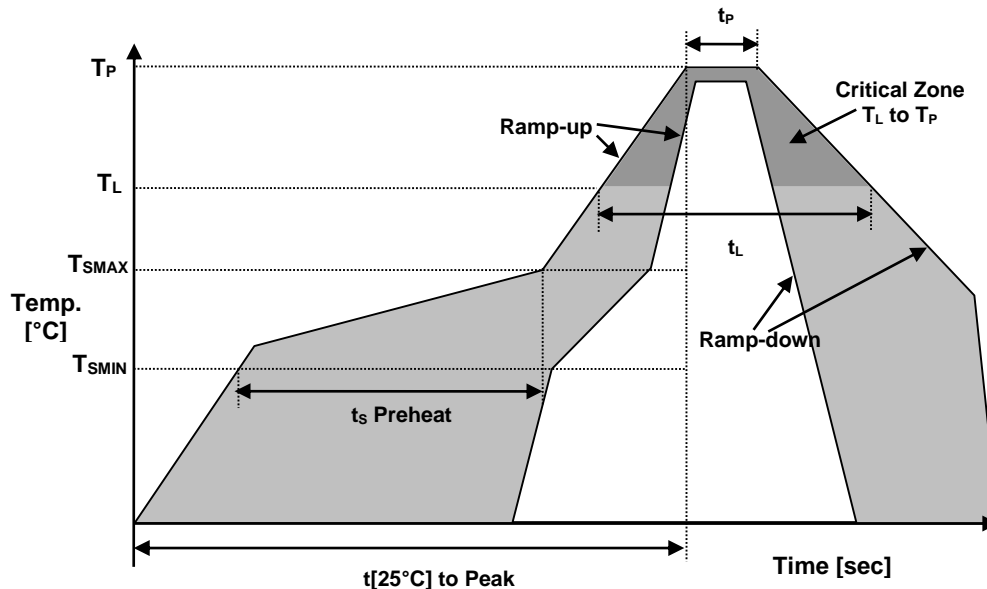
#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_0$	$V_{CC} \pm 5\%$	25.000	MHz
Supply voltage, nom.	$V_{CC}$	$V_{CC} \pm 5\%$ ,	1.8	VDC
Supply current, max	$I_S$	$V_{CC} \pm 5\%$	1.5	mA
Operating temperature	$T_a$	-----	-40 ~ +85	°C
Storage temperature	$T(stg)$	Absolute max	-40 ~ +85	°C
Frequency Stability vs. Temperature Max	$\Delta f/f_0(T_a)$	Reference to +25°C Over -30°C to +85°C	±0.5	ppm
vs. Supply Voltage Max	$\Delta f/f_0(T_a)$	Reference to +25°C Over -40°C to -30°C	±4.0	ppm
vs. Load Max	$\Delta f/f_V$	$V_{CC} \pm 5\%$	±0.2	ppm
vs. Aging Max	$\Delta f/f_L$	Load ±10%	±0.2	ppm
	$\Delta f/f_0(\text{year})$	Per Year at +25°C ± 2°C	±1.0	ppm
Initial Frequency Calibration, Max	$f_c$	Measured at 25°C, Reference to $f_0$	±2.0	ppm
Frequency Slope, Max	-	Reading every 2°C over -20°C to +70°C	0.1	ppm/°C
	-	Reading every 2°C over -40°C to -20°C and +70°C to +85°C	0.2	ppm/°C
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.	$\mathcal{E}(\Delta f)$	$\Delta f=1$ KHz	-130	dBc/Hz
Harmonics, Max	-	-----	-8.0	dBc

#### 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
Mechanical Shock	1000g peak amplitude, 6 ms duration, 5 cycles each axis, per Mil-Std-202, Method 213
Vibration	10g peak Acceleration for 20 minutes; 12 cycles in each axis, from 20 Hz to 2000 Hz, per EIA/JESD22-B103-B
Thermal Shock	Thermal Cycling from -40°C to +85°C, 30 minutes each cycle for 5 days, per EIA/JESD22-JA-104C
Temperature Humidity Bias	1000 hours @ 85°C/85% Relative Humidity, per Mil-Std-202, Method 106
MOISTURE SENSITIVITY LEVEL	1
REACH-SVHC	COMPLIANT
RoHS2	6/6 LEAD FREE
TERMINATION FINISH	Au

• MARKING

Rx25.0  
•AD3yw

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

YEAR CODE	
Year	Code
2011	1
2012	2
2013	3
2014	4
2015	5
2016	6
2017	7
2018	8
2019	9

ALPHA WEEK CODE TABLE					
Week	Code	Week	Code	Week	Code
1	a	19	s	37	K
2	b	20	t	38	L
3	c	21	u	39	M
4	d	22	v	40	N
5	e	23	w	41	O
6	f	24	x	42	P
7	g	25	y	43	Q
8	h	26	z	44	R
9	i	27	A	45	S
10	j	28	B	46	T
11	k	29	C	47	U
12	l	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	o	33	G	51	Y
16	p	34	H	52	Z
17	q	35	I		
18	r	36	J		

■ APPROVALS

RALTRON	
DRAWN BY:	FP, 30 May 2014
APPROVED BY:	FP, 30 May 2014
REVISION:	A, Initial Release
	12-12-14: REV B MODIFIED OUTLINE DRAWING