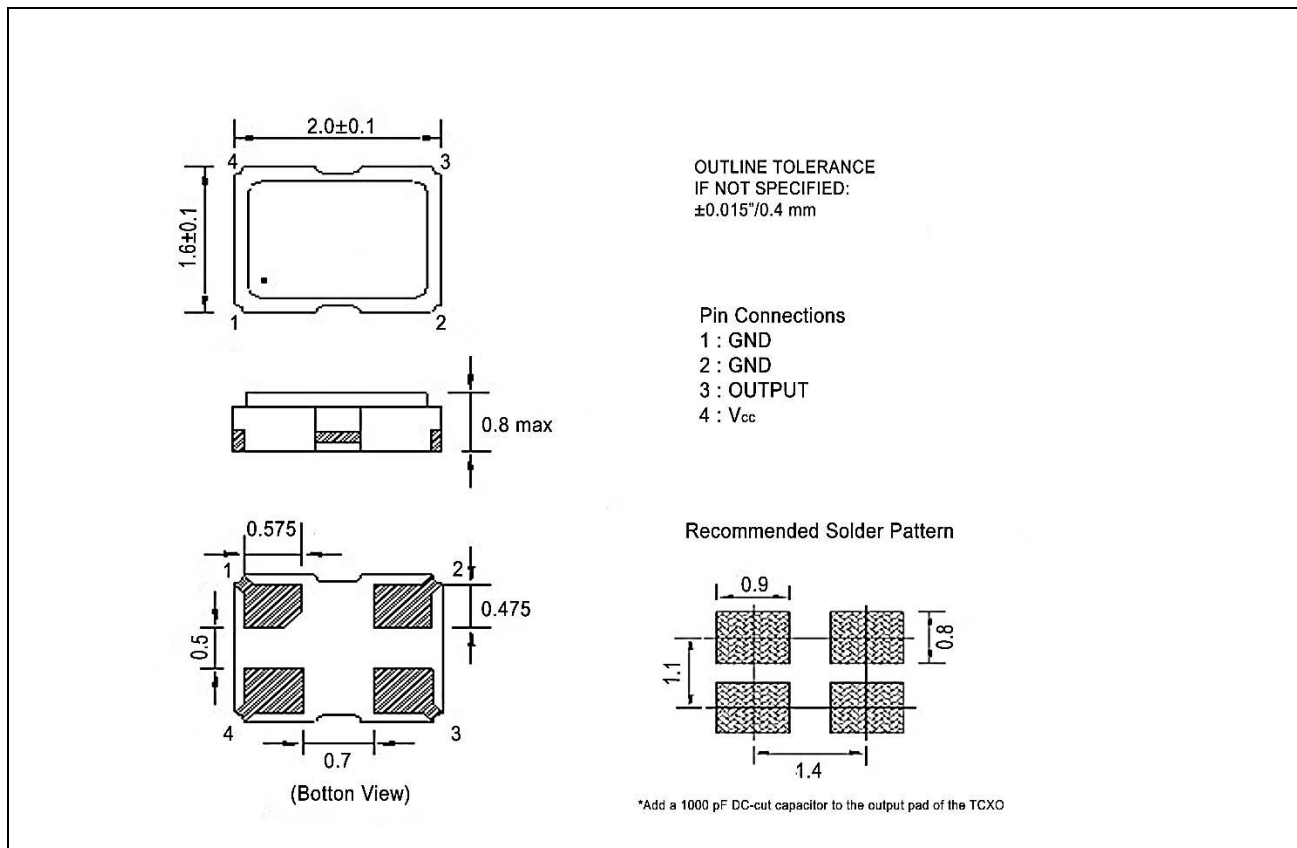


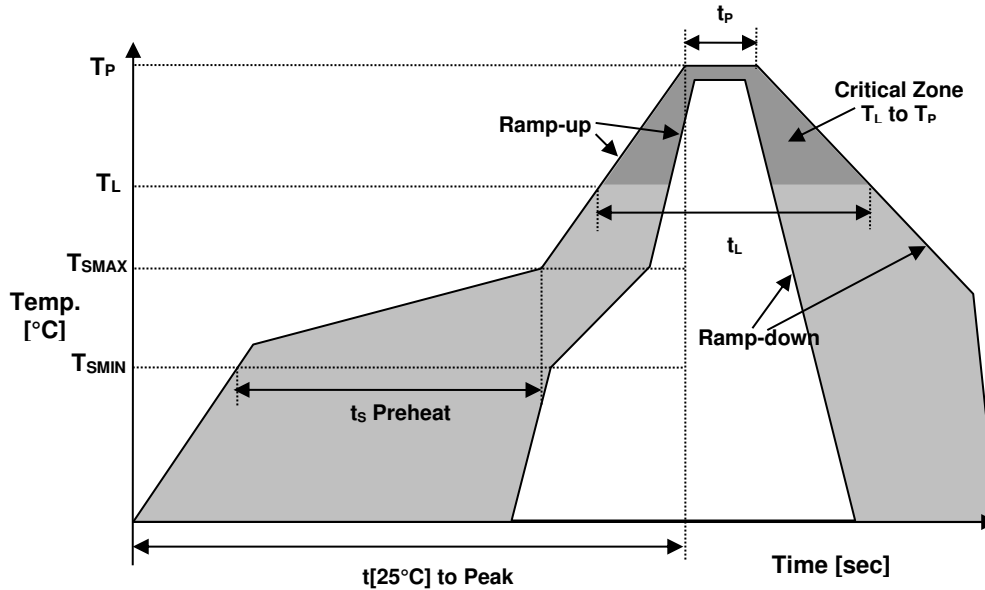
#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_0$	$V_{CC} \pm 5\%$	32.000	MHz
Supply Voltage, nom.	$V_{CC}$	$V_{CC} \pm 10\%$	2.8	VDC
Supply Current, max	$I_S$	$V_{CC} \pm 5\%$	3.0	mA
Operating Temperature Range	$T_a$		-40 ~ +85	°C
Storage Temperature Range	$T(stg)$	Absolute max	-40 ~ +85	°C
Frequency Stability vs. Temperature	$\Delta f/f_0(T_a)$	Reference to +25°±2°C (-30 ~ +85°C)	±1.0	ppm
		Reference to +25°±2°C (-40 ~ -30°C)	±2.0	ppm
Frequency Stability vs. Supply Voltage vs. Load vs. Aging max	$\Delta f/f_0$ $\Delta f/f_L$ $\Delta f/f_0(\text{year})$	$V_{CC} \pm 5\%$	±0.2	ppm
		Load ±10%	±0.2	ppm
		Per Year at +25°C ± 2°C	±1.0	ppm
Initial Frequency Calibration, Max		Measured at 25°C, after 2 reflows	±2.0	ppm
Start Up Time			5	ms
Output Level, Clipped Sine Wave		10kΩ // 10 pF ±10%	0.8	$V_{P-P}$
Phase Noise	$\mathcal{L}(\Delta f)$	@100 kHz	-147	dBc/Hz

#### MECHANICAL SPECIFICATION



#### REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T <sub>SMIN</sub>	150°C
Temperature Max Preheat	T <sub>SMAX</sub>	200°C
Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )	t <sub>s</sub>	60-180 sec.
Temperature	T <sub>L</sub>	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/sec max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/sec max.
Time within 5°C of Peak Temperature	t <sub>p</sub>	10 sec.
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.
Time	t <sub>L</sub>	60-150 sec.

#### ENVIRONMENTAL

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



● **MARKING**

Rx32.00

●B32yw

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
Created by, date: CP, November 15, 2017
Eng. approval, date: JI, November 15, 2017
Revision: A Initial release B CP February 14, 2019 Updated Mechanical Specification

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