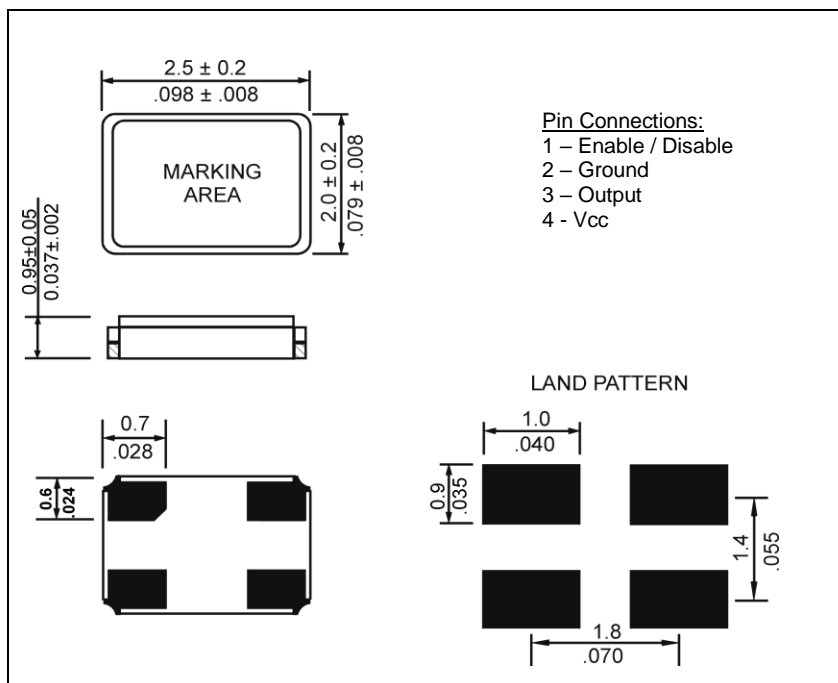


#### ELECTRICAL SPECIFICATION

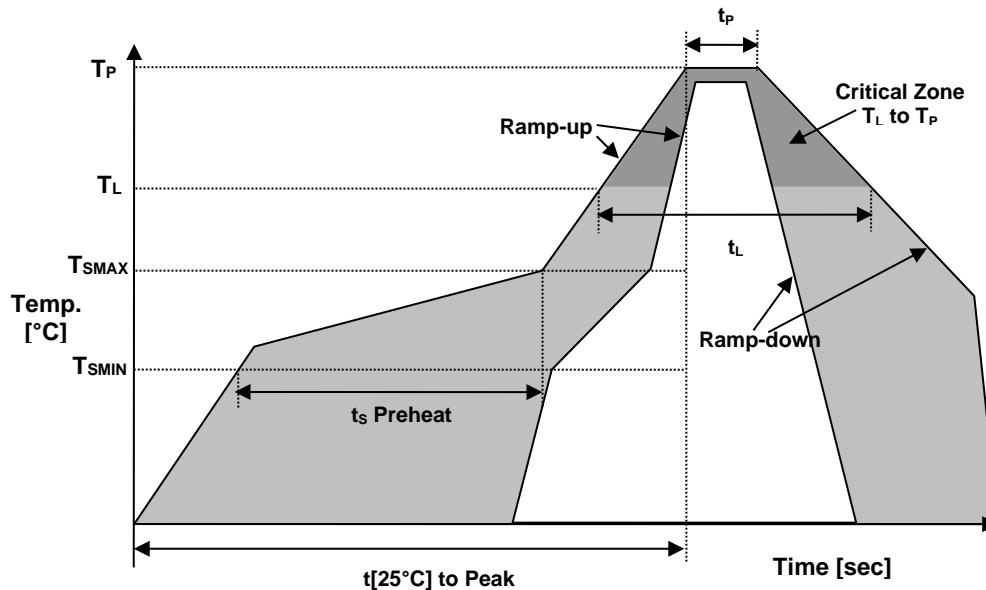
PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_o$	$T_a=25^{\circ}\text{C}$	0.032768	MHz
Supply voltage range	$V_{CC}$	---	2.5	VDC
Supply current, max	$I_s$	$T_a=25^{\circ}\text{C}$	15	mA
Operating temperature	$T_a$	---	-40 ~ +85	$^{\circ}\text{C}$
Storage temperature	$T_{(stg)}$	Absolute max	-55 ~ +125	$^{\circ}\text{C}$
Frequency Tolerance	$\Delta f/f_o$	Inclusive of $25^{\circ}\text{C}$ Tolerance and Changes due to Operating Temperature	$\pm 25$	ppm
Output Voltage	$V_{OL}$	Logic "0" Level	$0.1 \times V_{CC}$	VDC
	$V_{OH}$	Logic "1" Level	$0.9 \times V_{CC}$	VDC
Output Load	---	CMOS Output	30	pF
Enable / Disable Function	E/D	Pin 1: N.C. (Open) or High	Pin 3 – Oscillation (Enabled)	
		Pin 1: Low	Pin 3 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% Vdd	45 to 55	%
Rise Time and Fall Time, Max	$t_r / t_f$	@10% to 90% Vdd	10	ns
Stand-by Current, Max	$I_{stand-by}$	$T_a=25^{\circ}\text{C}$ , Pin #1=10%Vcc	10	$\mu\text{A}$
Start-up Time, Max	$t_{Start-up}$	$T_a=25^{\circ}\text{C}$	10	ms

#### MECHANICAL SPECIFICATION



NOTE: A capacitor of 0.01  $\mu\text{F}$  between Vcc and Ground is recommended

### 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
RoHS2	6/6 COMPLIANT & LEAD FREE
REACH-SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
TERMINATION FINISH	Au





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# CLOCK OSCILLATOR

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## MARKING

Rx0.03

•25Ayw

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		

## APPROVAL

RALTRON	
DRAWN BY:	KJackson, October 21, 2015
APPROVED BY:	KJackson, October 21, 2015
REVISION:	A, Initial Release
	B, Frequency tolerance and Start-up time specs updated KJ 6/22/23

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