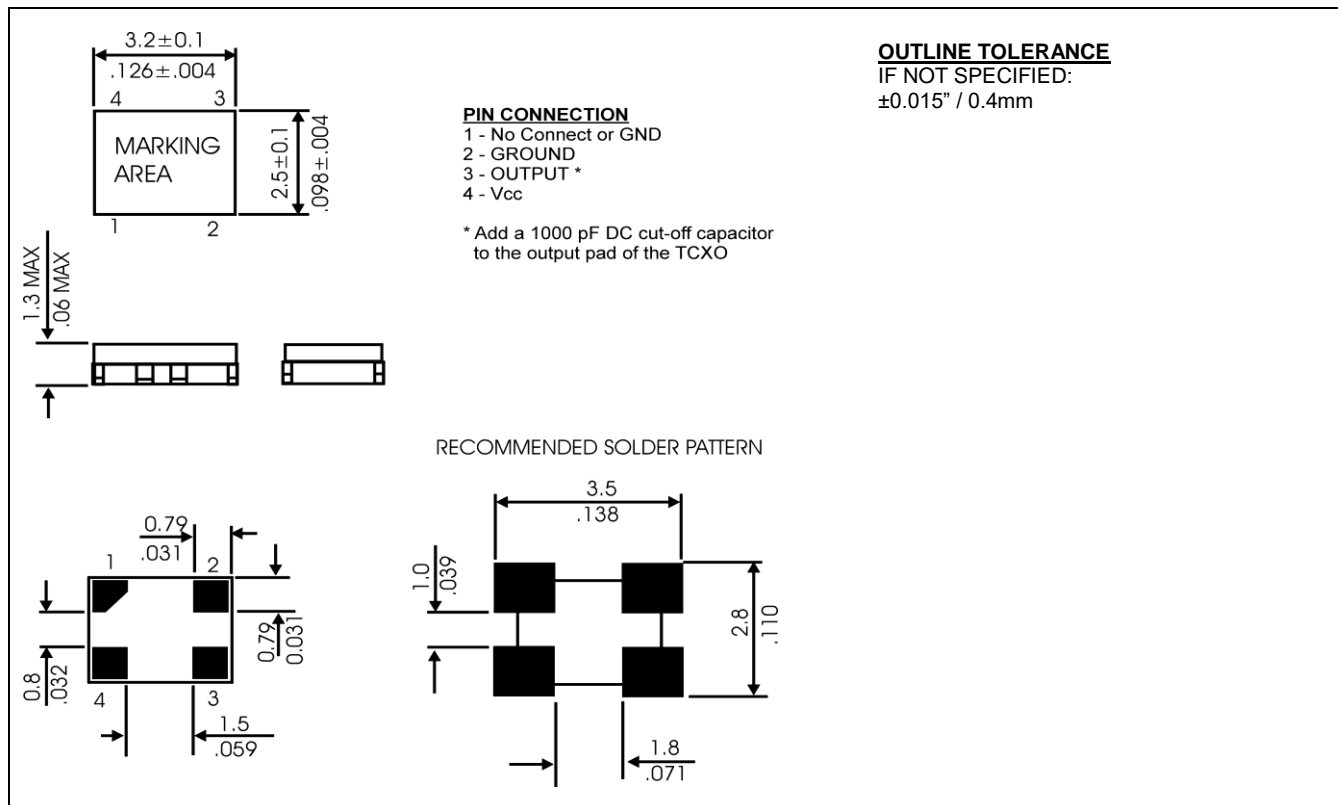


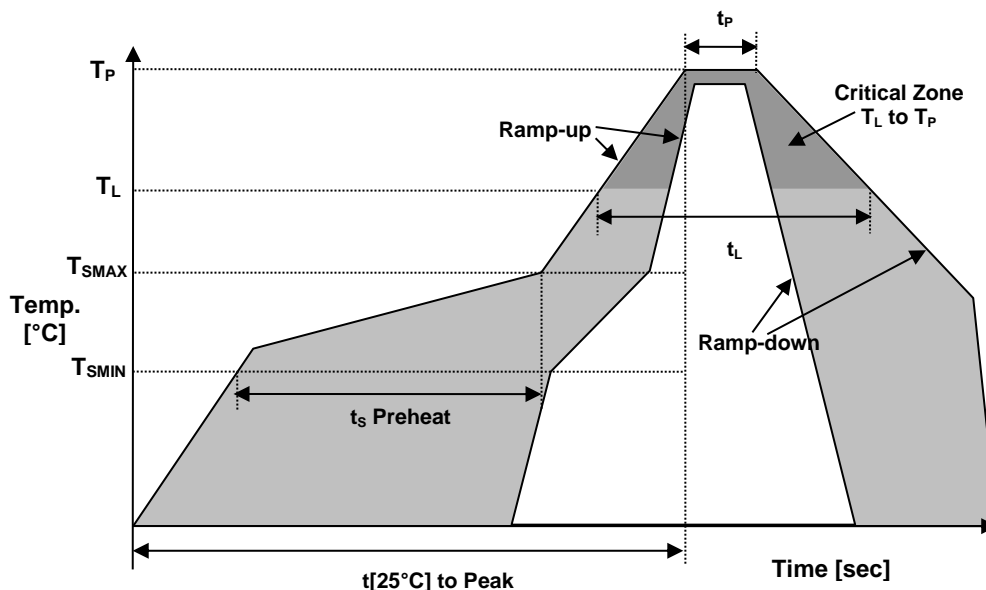
#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_o$	$T_a=25^{\circ}\text{C}$	10.000	MHz
Supply voltage range	$V_{CC}$	---	3.3	VDC
Supply current, max	$I_s$	$T_a=25^{\circ}\text{C}$	2.0	mA
Operating temperature	$T_a$	---	-30 ~ +85	$^{\circ}\text{C}$
Storage temperature	$T(\text{stg})$	Absolute max	-40 ~ +85	$^{\circ}\text{C}$
Frequency Stability				
vs. Temperature	$\Delta f/f_o(T_a)$	Reference to +25 $^{\circ}\text{C}$ over Temperature Range	$\pm 0.5$	ppm
vs. Supply Voltage	$\Delta f/f_v$	$V_{CC} \pm 5\%$	$\pm 0.2$	ppm
vs. Load	$\Delta f/f_L$	Load $\pm 5\%$ , $V_{CC}=\pm 5\%$	$\pm 0.2$	ppm
vs. Aging Max	$\Delta f/f_o(\text{year})$	Per Year at +25 $^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\pm 1.0$	ppm
Initial Frequency Calibration, Max	$f_c$	Measured at 25 $^{\circ}\text{C}$ , Reference to $f_o$	$\pm 2.0$	ppm
Output Level, Clipped Sine Wave, Minimum	-	10 k $\Omega$ // 10 pF $\pm 5\%$	0.8	$V_{P-P}$
Start up time, Max	$t_s$	$V_{OUT} \geq 90\% V_{P-P}$	2.0	ms
Phase noise @ freq. offset, typical.	$\mathcal{L}(\Delta f)$	$\Delta f=100$ Hz	-110	dBc/Hz
	$\mathcal{L}(\Delta f)$	$\Delta f=1$ kHz	-130	dBc/Hz
	$\mathcal{L}(\Delta f)$	$\Delta f=10$ kHz	-142	dBc/Hz
	$\mathcal{L}(\Delta f)$	$\Delta f=100$ kHz	-147	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	$t_{[25^\circ\text{C}] \text{ to Peak}}$	480 sec.
Time	$t_L$	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



• MARKING

Rxx10.000

- A33yw

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:	LP, December 07, 2016
APPROVED BY:	Cp, December 07, 2016
REVISION:	A, Initial Release

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