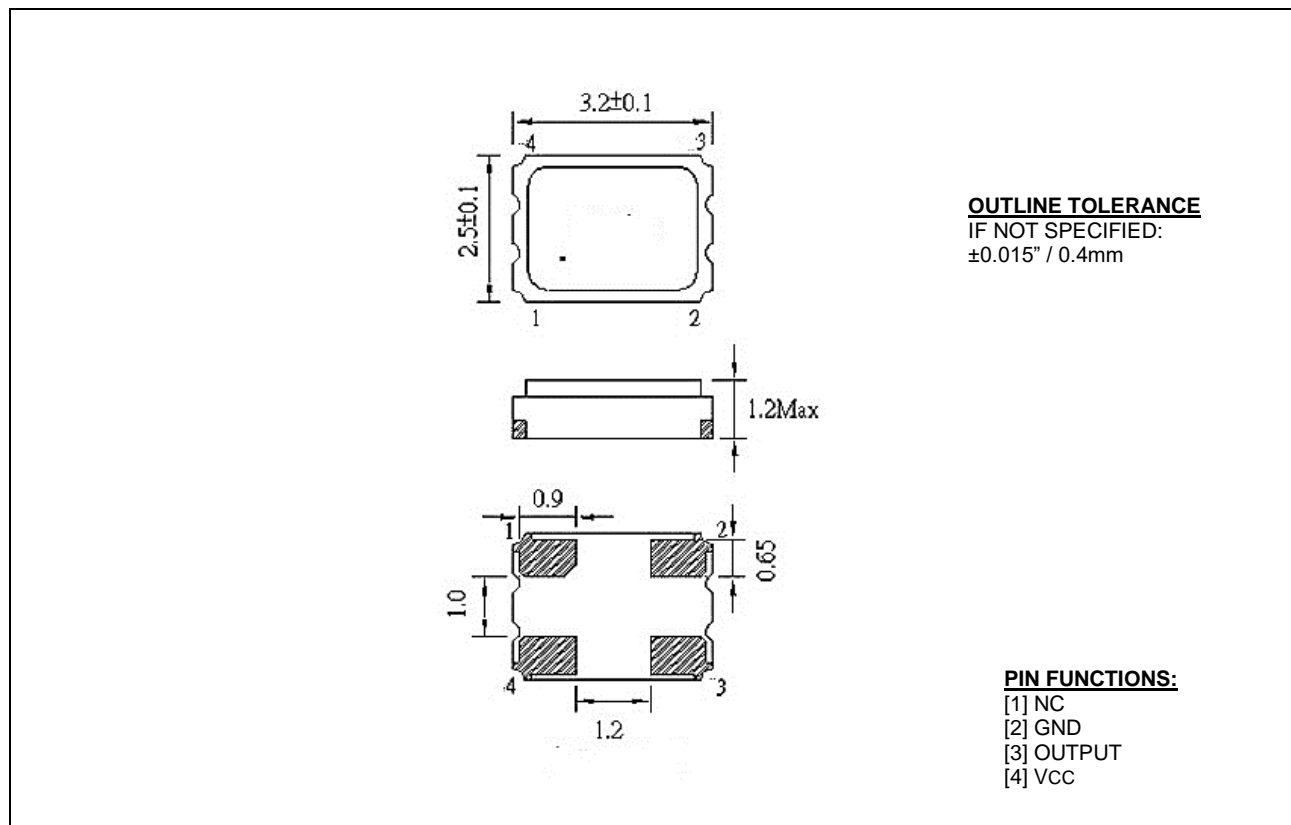


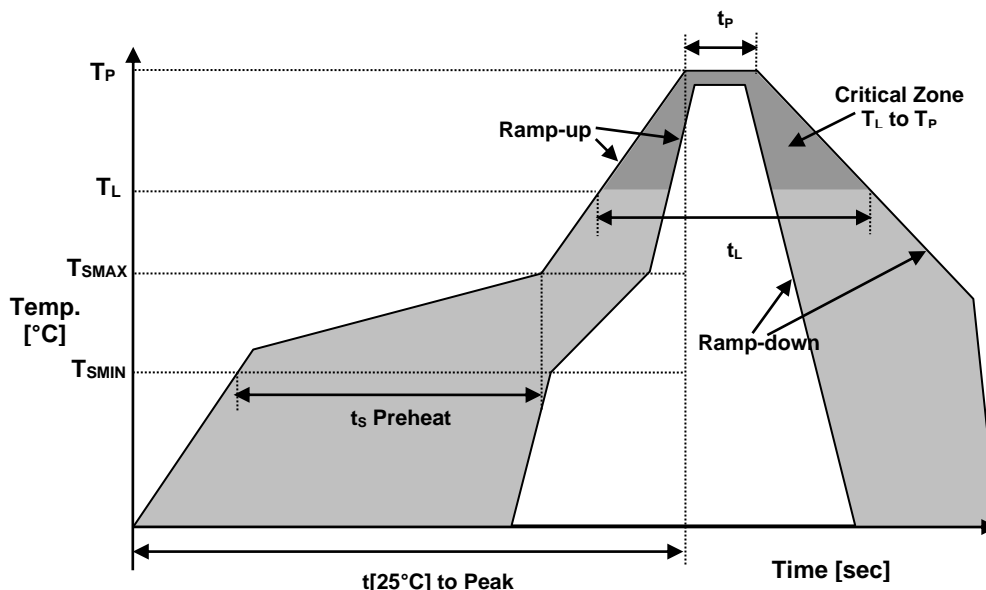
#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_0$	$V_{CC} \pm 5\%$	27.000	MHz
Supply Voltage, nom	$V_{CC}$	---	2.8 ~ 3.3	VDC
Supply Current, max	$I_S$	$V_{CC} \pm 5\%$	2.5	mA
Operating Temperature Range	$T_a$		-40 ~ +85	°C
Storage Temperature Range	$T(stg)$	Absolute max	-40 ~ +85	°C
Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging max	$\Delta f/f_0(T_a)$ $\Delta f/f_V$ $\Delta f/f_L$ $\Delta f/f_0(\text{year})$	Reference to +25°C over Temperature Range $V_{CC} \pm 5\%$ Load $\pm 10\%$ First Year at +25°C $\pm 2^\circ\text{C}$	$\pm 1.0$ $\pm 0.2$ $\pm 0.2$ $\pm 1.0$	ppm ppm ppm ppm
Initial Frequency Calibration, max	$f_c$	Measured at 25°C, before shipment	$\pm 1.0$	ppm
Reflow Shift, max	$\Delta f/fr$	2 consecutive reflows, after 2 hours relaxation	$\pm 1.0$	ppm
Start-up Time, max	$T_s$	---	5	ms
Output Level, Clipped Sine Wave, min		10k $\Omega$ // 10 pF $\pm 10\%$	0.8	$V_{P-P}$
Phase Noise	$\mathcal{L}(\Delta f)$	@1 kHz	-130	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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TCXO

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MARKING

Rx27.00

•BDCyw

x – Internal Production ID code

y – Year code

w – Week code

YEAR CODE	
Year	Code
2018	8
2019	9
2020	0
2021	1
2022	2
2023	3
2024	4
2025	5
2026	6
2027	7
2028	8
2029	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:	AR, June 01, 2021
APPROVED BY:	CP, June 01, 2021
REVISION:	A, Initial Release

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