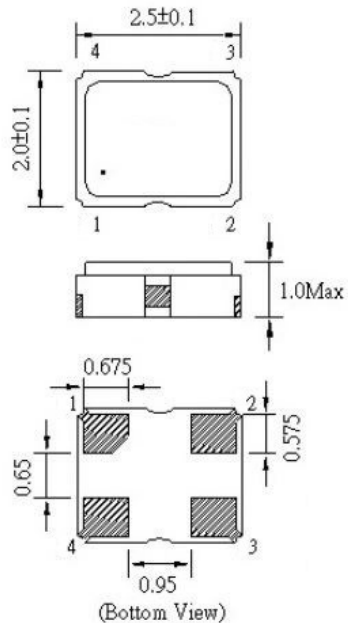


#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_0$	$V_{CC} \pm 5\%$	19.200	MHz
Supply Voltage, nom.	$V_{CC}$	$V_{CC} \pm 5\%$	3.3	VDC
Supply Current, max	$I_S$	$V_{CC} \pm 5\%$	1.5	mA
Operating Temperature Range	$T_a$		-40 ~ +85	°C
Storage Temperature Range	$T(stg)$	Absolute max	-40 ~ +85	°C
Frequency Stability				
vs. Temperature, max	$\Delta f/f_0(T_a)$	Reference to +25°±2°C (-40 to 85°C)	±0.5	ppm
vs. Supply Voltage	$\Delta f/f_V$	$V_{CC} \pm 5\%$	±0.2	ppm
vs. Load	$\Delta f/f_L$	Load ±10%	±0.2	ppm
vs. Aging Max	$\Delta f/f_0(\text{year})$	Per Year at +25°C ± 2°C	±1.0	ppm
Initial Frequency Calibration, max	$f_c$	Measured at 25°C, Reference to $f_0$ after 2 reflows	±2.0	ppm
Output Level, Clipped Sine Wave	-	10kΩ // 10 pF ±10%	0.8	$V_{P-P}$
Voltage Control Range	$V_C$	$V_C = 1.65 \pm 1.0$ Vdc	±18	ppm
Start up time, max	$t_s$	$V_{OUT} \geq 90\% V_{P-P}$	2.0	ms

#### MECHANICAL SPECIFICATION



#### OUTLINE TOLERANCE

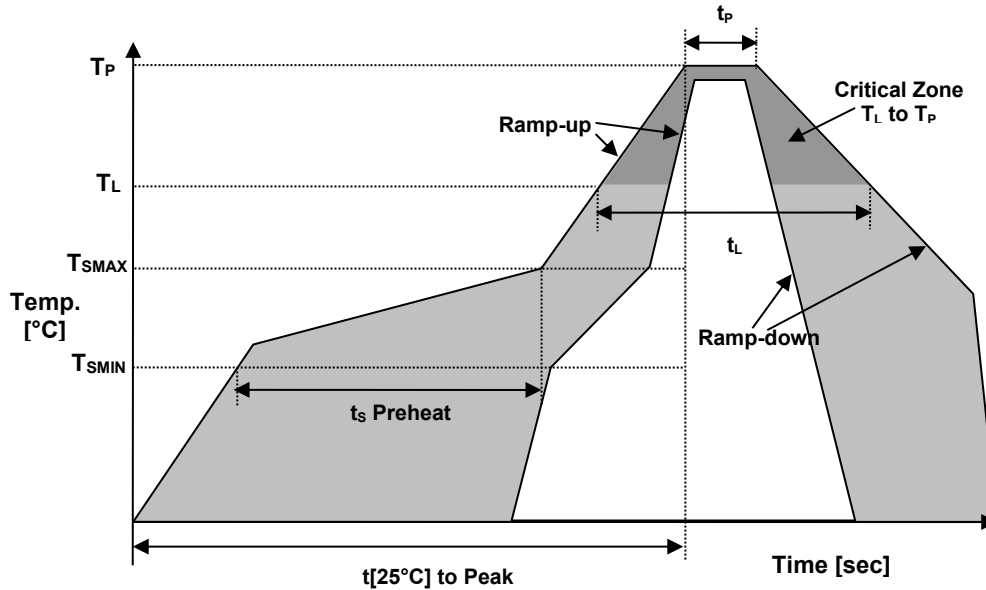
IF NOT SPECIFIED:  
±0.015" / 0.4mm

#### PIN FUNCTIONS:

- [1] Vcontrol
- [2] GND
- [3] OUTPUT \*
- [4] VCC

\* Add a 1000 pF DC-cut capacitor to the output pad of the TCXO.

#### 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-SVHC	COMPLIANT
RoHS	COMPLIANT
TERMINATION FINISH	Au



• MARKING

Rx192  
•AD3yw

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

YEAR CODE	
Year	Code
2015	5
2016	6
2017	7
2018	8
2019	9
2020	0
2021	1
2022	2
2023	3
2024	4
2025	5

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:	CP, June 20, 2019
APPROVED BY:	AR, June 20, 2019
REVISION:	A, Initial Release

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