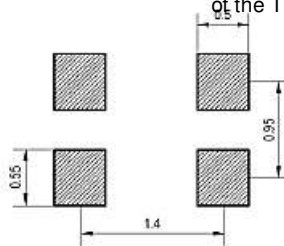
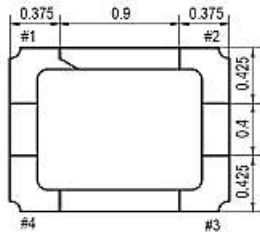
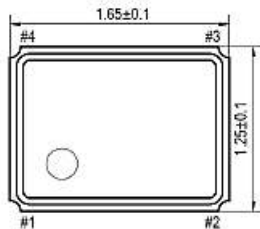


#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	$f_o$	$V_{CC} \pm 5\%$	52.000	MHz
Supply Voltage, nom.	$V_{CC}$	$V_{CC} \pm 10\%$	2.8	VDC
Supply Current, max	$I_s$	$V_{CC} \pm 5\%$	2.0	mA
Operating Temperature Range	$T_a$		-40 ~ +85	°C
Storage Temperature Range	$T(stg)$	Absolute max	-40 ~ +85	°C
Frequency Stability, max	vs. Temperature	$\Delta f/f_T$	Reference to +25° (-40 ~ +85°C)	±1.0
	vs. Supply Voltage	$\Delta f/f_V$	@2.8VDC±10%	±0.2
	vs. Load	$\Delta f/f_L$	@10kΩ±10%, 10pF±10%	±0.2
	vs. Aging	$f/f_o(\text{year})$	@ +25°±2°C	±1.0
	Vs. Reflow		1h after reflow	±1.0
Initial Frequency Calibration, max		Measured at 25°C±2°C	±1.5	ppm
Start Up Time, max			2	ms
Output Level, Clipped Sine Wave		10kΩ // 10 pF ±10%	0.8	V <sub>P-P</sub>
Phase Noise	$\mathcal{L}(\Delta f)$	@1 kHz offset	-135	dBc/Hz
Harmonics, max			-5.0	dBc

#### MECHANICAL SPECIFICATION



##### OUTLINE TOLERANCE

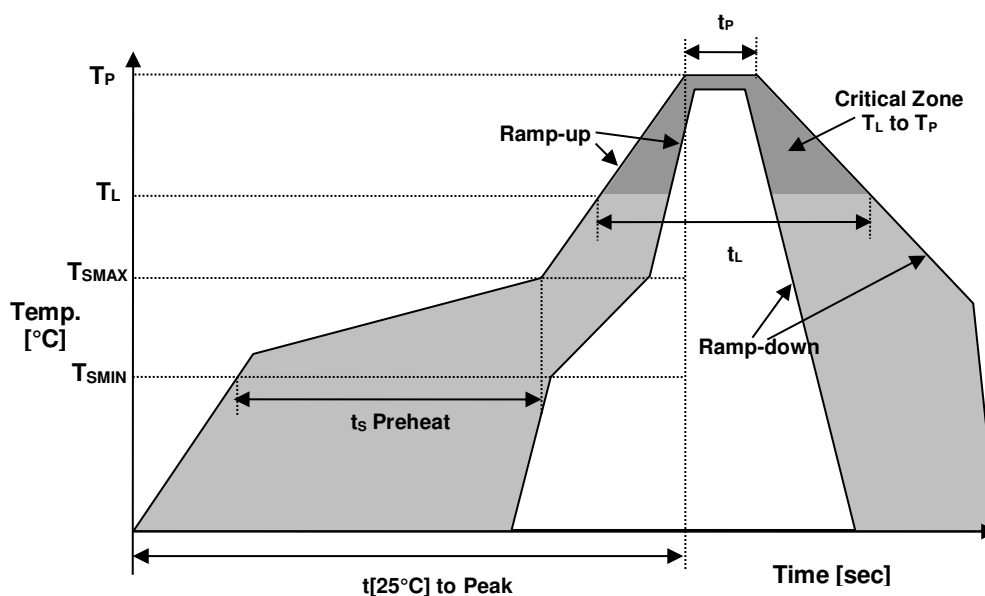
IF NOT SPECIFIED:  
±0.015" / 0.4mm

##### PIN FUNCTIONS:

- [1] GND
- [2] GND
- [3] OUTPUT \*
- [4] V<sub>CC</sub>

\* 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	Compliant
RoHS	Compliant
TERMINATION FINISH	Au



### MARKING

Rx52.00

•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 27, 2017
Eng. approval, date:	JL, November 27, 2017
Revision:	A, Initial Release

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