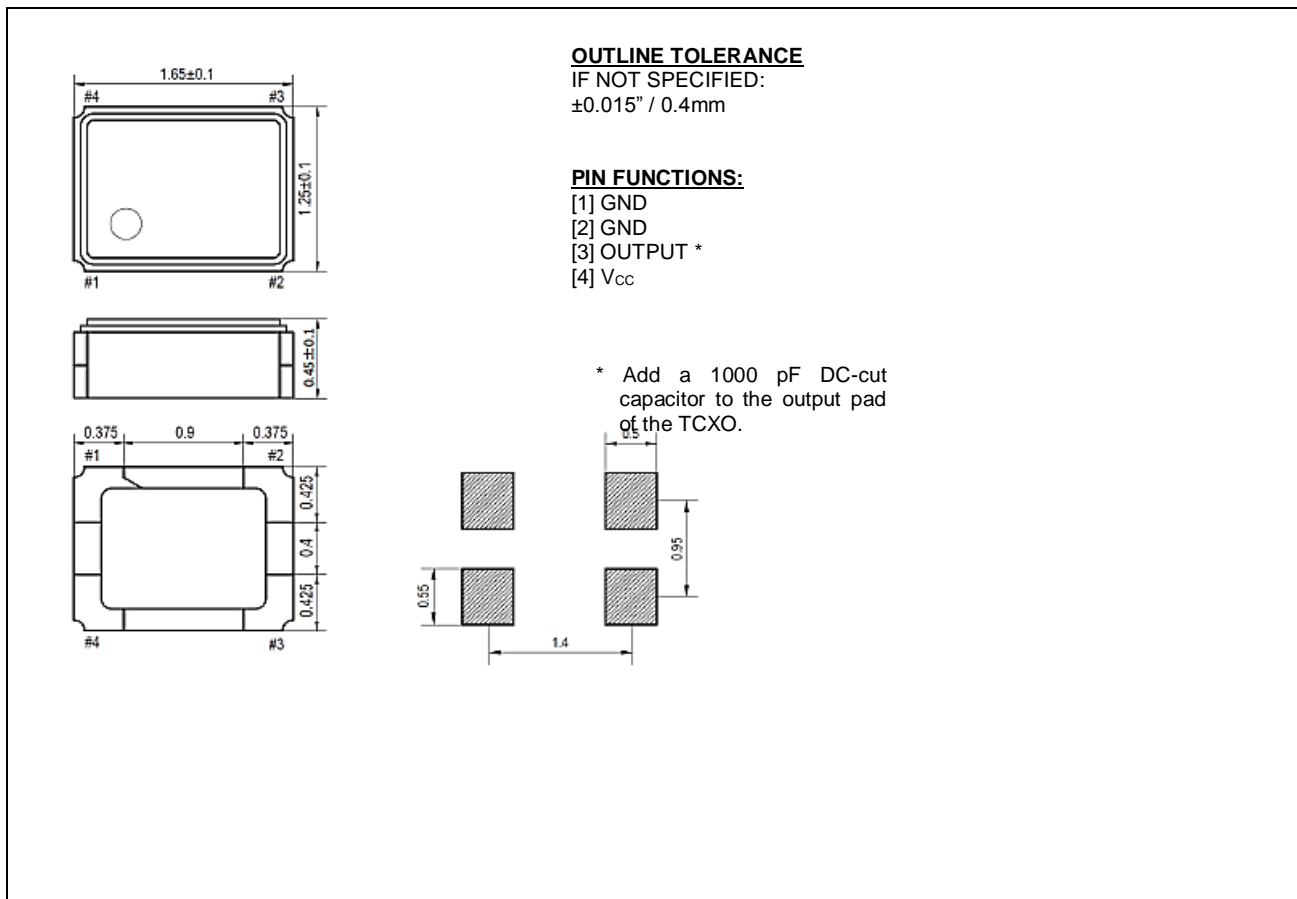


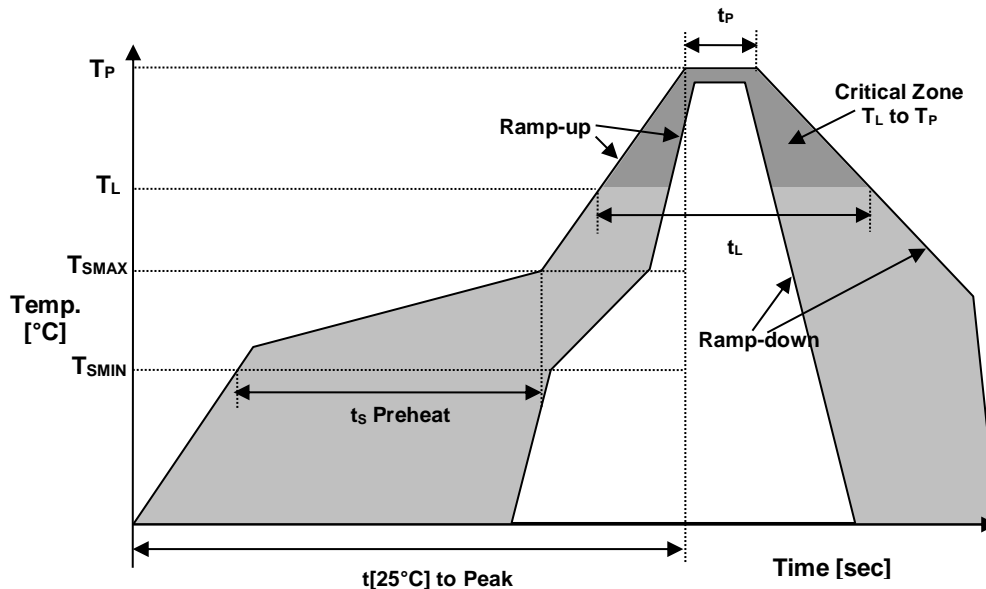
ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT	
Nominal Frequency	f_0	$V_{CC} \pm 5\%$	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	ppm
	vs. Supply Voltage	$\Delta f/f_V$	@2.8VDC±10%	±0.2	ppm
	vs. Load	$\Delta f/f_L$	@10kΩ±10%, 10pF±10%	±0.2	ppm
	vs. Aging	$f/f_0(\text{year})$	@ +25°±2°C	±1.0	ppm
	Vs. Reflow		1h after reflow	±1.0	ppm
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 _{P-P}	
Phase Noise	$\mathcal{E}(\Delta f)$	@1 kHz offset	-135	dBc/Hz	
Harmonics, max			-5.0	dBc	

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°C] to Peak Temperature	t[25°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: JI, November 27, 2017
Revision: A, Initial Release

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