

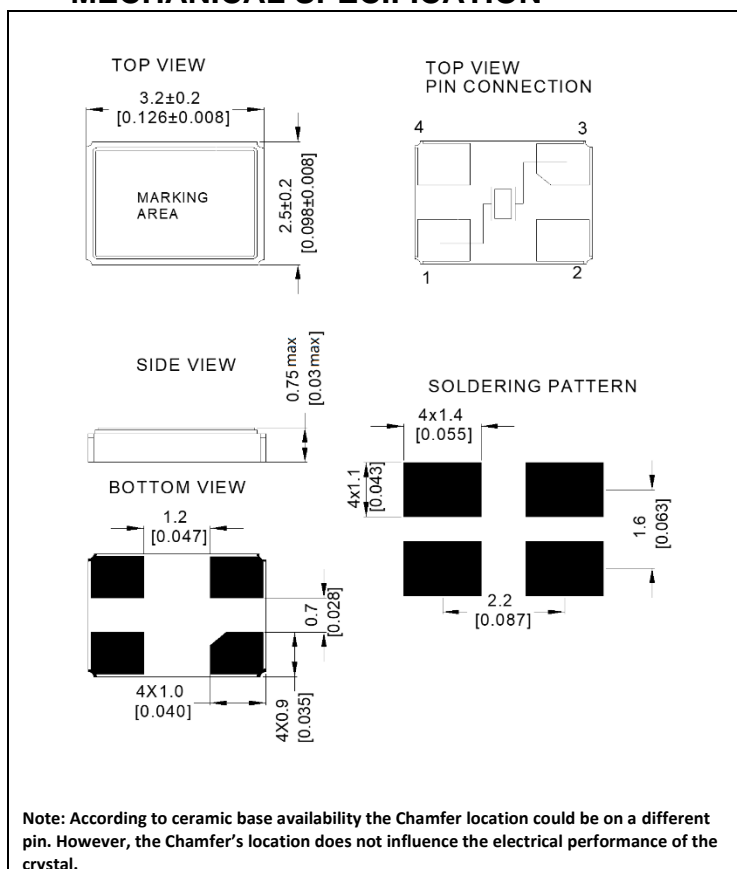
## SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	24.000 MHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±10 ppm max
FREQUENCY STABILITY OVER TEMPERATURE	±10 ppm max
OPERATING TEMPERATURE RANGE	-20°C to +85°C ⇄
STORAGE TEMPERATURE RANGE	-40°C to +85°C
AGING	±1 ppm per year max ⇄
LOAD CAPACITANCE	9 pF
EQUIVALENT SERIES RESISTANCE	40 Ω max ⇄
SHUNT CAPACITANCE	2 pF max ⇄
MOTIONAL CAPACITANCE	3.2 fF typ ⇄
DRIVE LEVEL	100 μW max ⇄
INSULATION RESISTANCE	500 MΩ min @ DC 100V

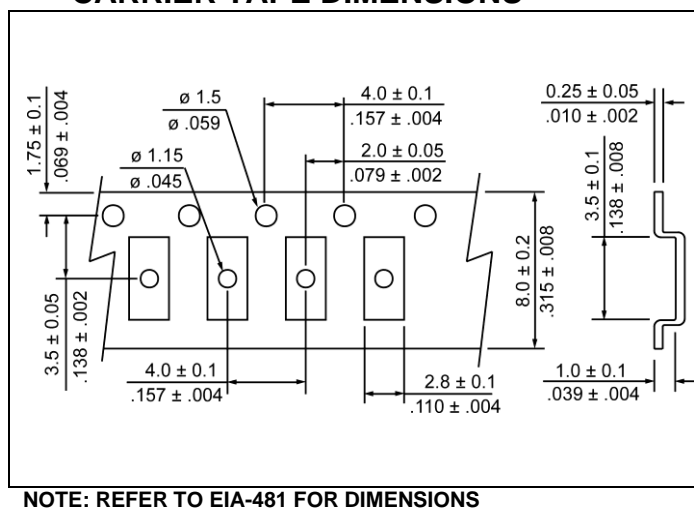


Photo is not actual part

## MECHANICAL SPECIFICATION



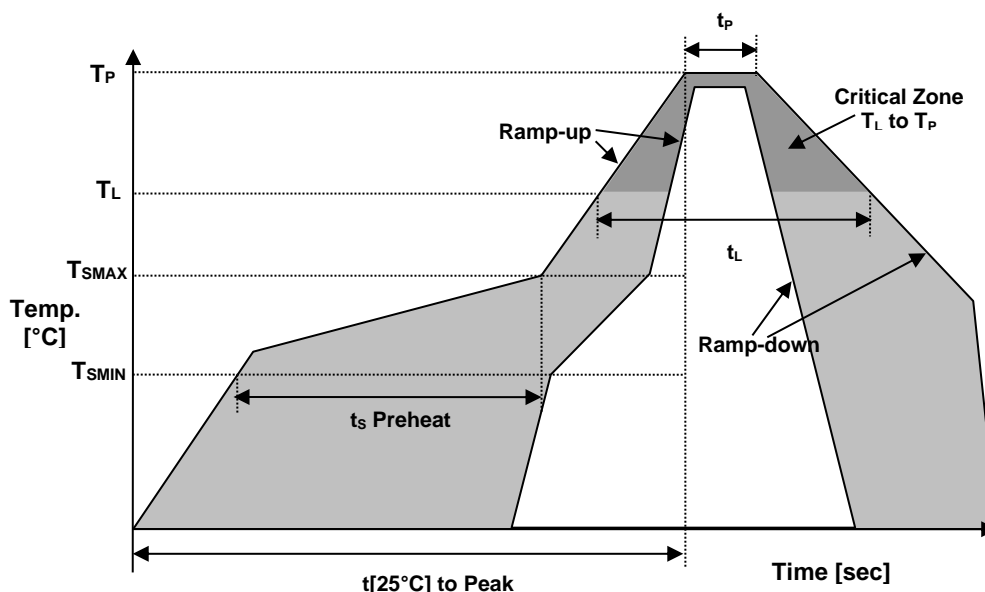
## CARRIER TAPE DIMENSIONS



## PACKAGING

178 mm REEL DIAMETER  
 8 mm TAPE WIDTH, 4 mm PITCH  
 QUANTITY: 3000 PIECES PER REEL  
 IN ACCORDANCE WITH EIA-481

## 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
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au





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## SURFACE MOUNT MICROPROCESSOR CRYSTAL

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RH100-24.000-9-1010-TR-NS4

### ● MARKING

R24.000  
x9Eyw

x – 1 or 2 Digits as 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

DRAWN BY	LP, June 13, 2017
APPROVED BY	JI, June 13, 2017
REVISION	A, Initial Release B, Updated to current spec levels by XLiu

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RALTRON ELECTRONICS ■ 10400 N.W. 33<sup>rd</sup> STREET ■ Miami, Florida 33172 ■ U.S.A.  
Telephone: 305-593-6033 ■ Fax: 305-594-3973 ■ e-mail: sales@raltron.com ■ web site: <http://www.raltron.com>