

## ● SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	12.000 MHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
FREQUENCY STABILITY OVER TEMPERATURE	±30 ppm max
OPERATING TEMPERATURE RANGE	-20°C to +70°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±2 ppm first year max
LOAD CAPACITANCE	20 pF
EQUIVALENT SERIES RESISTANCE	100 Ω max
SHUNT CAPACITANCE	3.5 pF max
DRIVE LEVEL	300 μW max
INSULATION RESISTANCE	500 MΩ min @ DC 100V

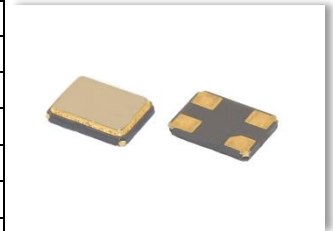
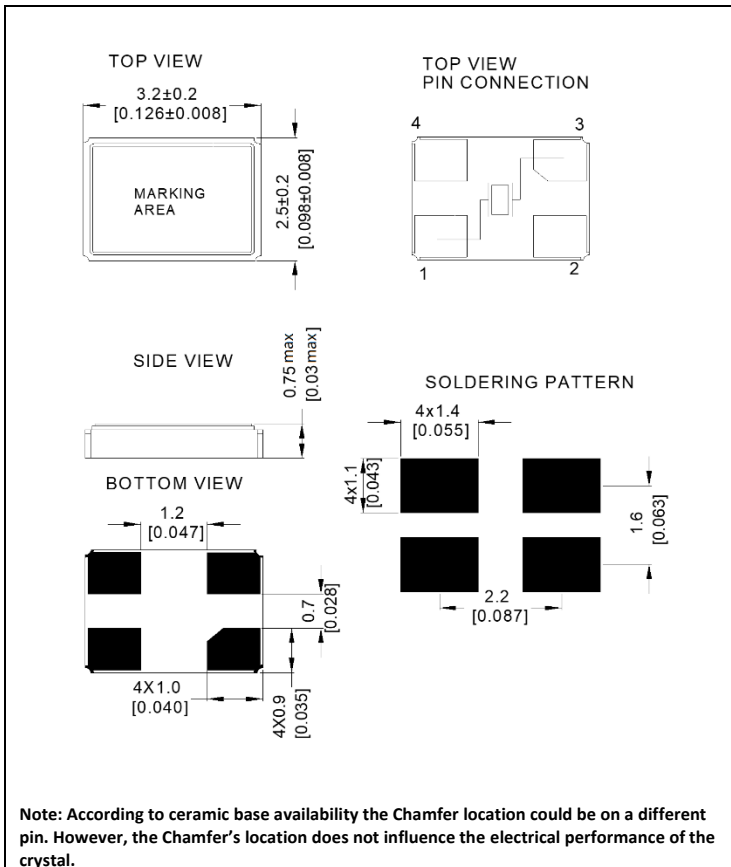
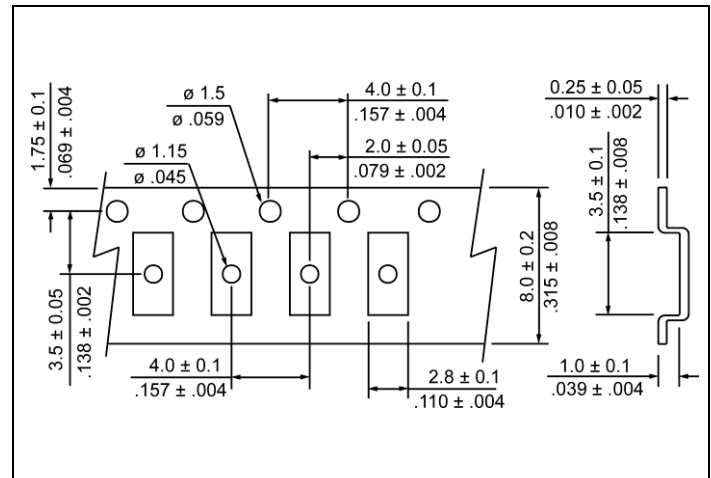


Photo is not actual part

## ● MECHANICAL SPECIFICATION



## ● CARRIER TAPE DIMENSIONS



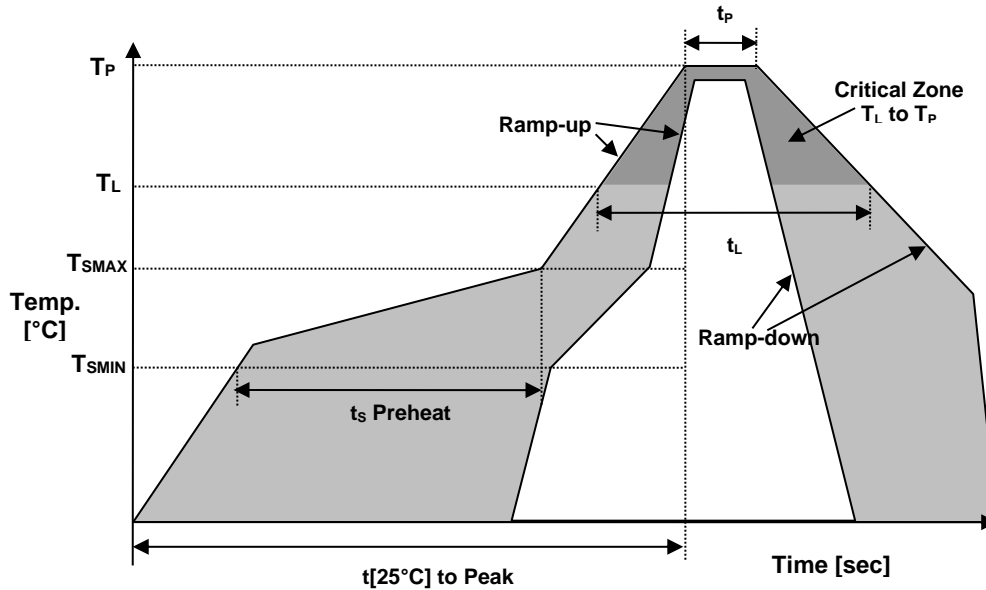
NOTE: REFER TO EIA-481 FOR DIMENSIONS

## ● 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



● MARKING

R12.000  
xADyw

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	KJackson, January 30, 2015
APPROVED BY	KJackson, January 30, 2015
REVISION	A, Initial Release B, Updated to current spec levels by XLiu, August 31, 2022

Raltron Electronics/RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort to ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.

Copyright © 2016, Raltron Electronics / RAMI Technology USA, LLC. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Raltron Electronics / RAMI Technology USA, LLC.