

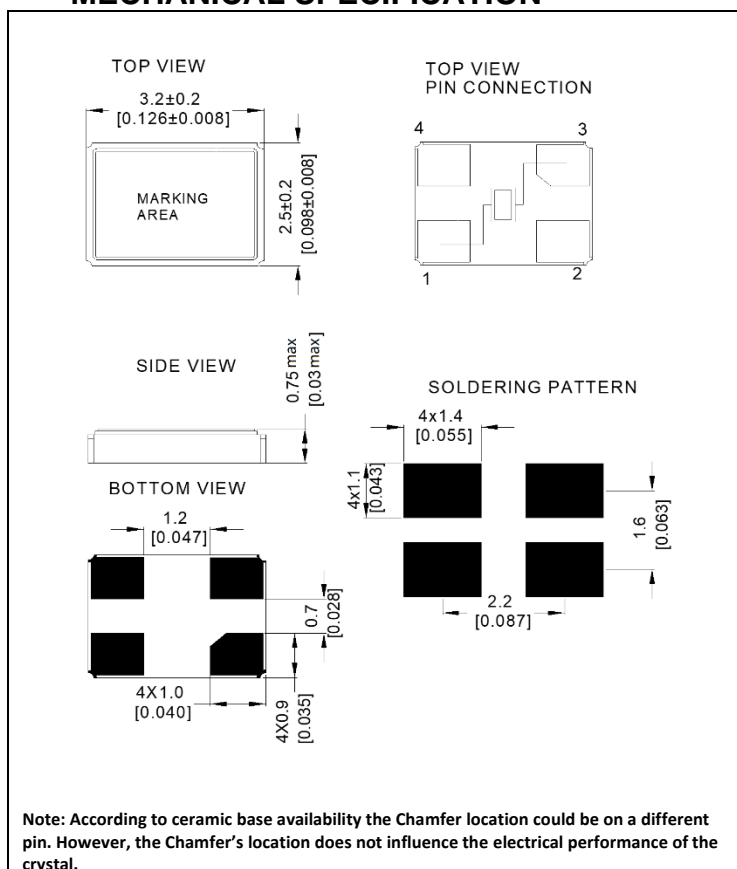
SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	25.000 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 +70°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±2 ppm first year max
LOAD CAPACITANCE	12 pF
EQUIVALENT SERIES RESISTANCE	60 Ω max
SHUNT CAPACITANCE	3 pF max
DRIVE LEVEL	300 μW max
INSULATION RESISTANCE	500 MΩ min @ DC 100V

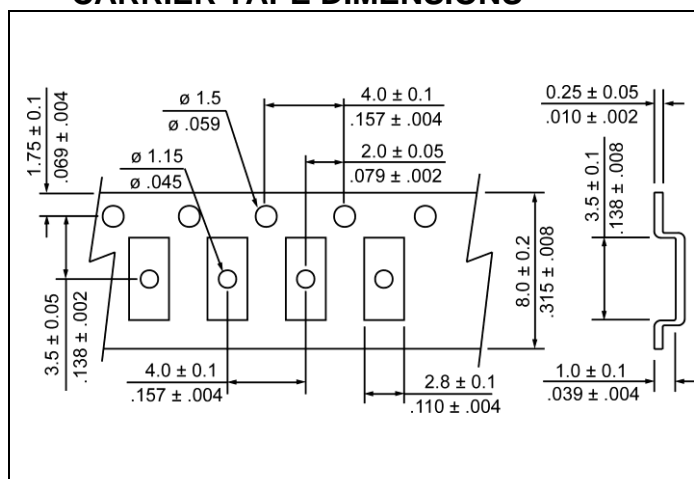


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS



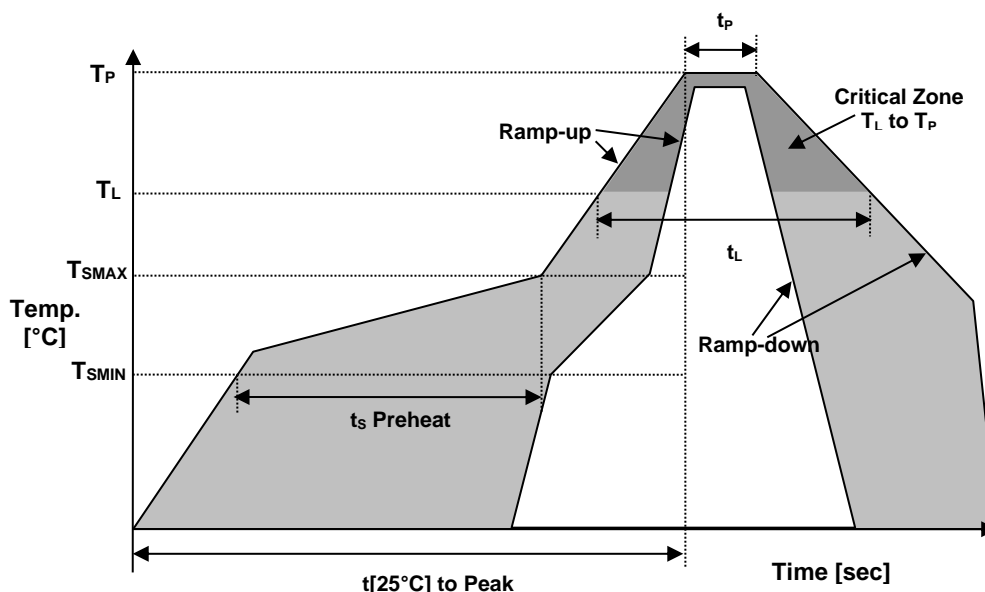
NOTE: REFER TO EIA-481 FOR DIMENSIONS

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 _S MIN	150°C
Temperature Max Preheat	T _S MAX	200°C
Time (T _S MIN to T _S MAX)	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
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au



MARKING

R25.000

xJEyw

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, August 29, 2016
APPROVED BY	KJackson, August 29, 2016
REVISION	A, Initial Release B, Updated drawing, marking, storage temp, C0 and drive level by XLiu, October 17, 2023

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.

■ RELIABILITY SPECIFICATIONS

Test Item	Test Methods/Conditions	Test Criteria	Reference
Drop Test	50cm for 2 times on hardWood.	Δ Freq. $\leq \pm 10$ ppm, Δ ESR $\leq \pm 3\Omega$ or 20% Good hermetically	IEC68-2-32 Free Fall All Frequency tests adopt series mode
Vibration	Frequency: 20 to 2000 Hz to 20Hz, 20g Amplitude: 1.5 mm Direction: X, Y, Z Duration: 2.0 hours in each direction	Δ Freq. $\leq \pm 10$ ppm, Δ ESR $\leq \pm 3\Omega$ or 20% Good hermetically	IEC68-2-6 MIL-STD-883H METHOD 2007.3 Condition A All Frequency tests adopt series mode
Solderability	Temperature: $260 \pm 5^\circ\text{C}$ Time: 10 ± 1 second	Pinhole, void and porosity, where the area must less than 5% Good hermetically	GB/T12273.1-4.8.3.2 All Frequency test adopt series mode
Aging	100°C for 168 hours	Δ Freq. $\leq \pm 10$ ppm, Δ ESR $\leq \pm 3\Omega$ or 20% Good hermetically	IEC 60068-2-2 (GB/T2423.2-2008) MIL-STD-883H Method 1008.2 All Frequency tests adopt series mode
Fine Leak	Helium Bombing: 0.4~0.5MPa Time: 1 hour	Helium Bombing: 0.4~0.5MPa Time: 1 hour	MIL-STD-883H METHOD 1014.13 All Frequency tests adopt series mode
High Temp Storage	Temperature: $85^\circ\text{C} \pm 5^\circ\text{C}$ Time 96 hours	Δ Freq. $\leq \pm 10$ ppm, Δ ESR $\leq \pm 3\Omega$ or 20% Good hermetically	IEC 60068-2-2 (GB/T2423.2-2008) All Frequency tests adopt series mode
Temperature Cycle	$25^\circ\text{C} \pm 3^\circ\text{C}$ for 10 minutes $-40^\circ\text{C} \pm 3^\circ\text{C}$ for 10 minutes $25^\circ\text{C} \pm 3^\circ\text{C}$ for 10 minutes $125^\circ\text{C} \pm 3^\circ\text{C}$ for 10 minutes 20 cycles	Δ Freq. $\leq \pm 10$ ppm, Δ ESR $\leq \pm 3\Omega$ or 20% Good hermetically	MIL-STD-883H METHOD 1010.8 All Frequency tests adopt series mode

RH100-25.000-12-F-1010-TR

Resistance to Soldering Heat	Temperature: 235°C \pm 5°C Time: 2 \pm 0.2 second	Δ Freq. \leq \pm 10ppm, Δ ESR \leq \pm 3 Ω or 20% Good hermetically	GB/T12273.1 -4.8.3.1 All Frequency tests adopt series mode
Humidity	Temperature: 40°C \pm 2°C Relative Humidity: 90%~95% Time: 96 hours	Δ Freq. \leq \pm 10ppm, Δ ESR \leq \pm 3 Ω or 20% Good hermetically	IEC 60068-2-3 Damp Heat (GB/T2423.3-2006) All Frequency tests adopt series mode
Thermal Shock	-40°C \pm 3°C to 100°C \pm 3°C, soak 15 minutes at each point, transfer time within 15 seconds, 20 cycles	Δ Freq. \leq \pm 10ppm, Δ ESR \leq \pm 3 Ω or 20% Good hermetically	IEC 60068-2-14 (GB/T 2423.22 -2002) MIL-STD-883H METHOD 1011.9 All Frequency tests adopt series mode
Low Temp Storage	-40°C \pm 3°C for 96 hours	Δ Freq. \leq \pm 10ppm, Δ ESR \leq \pm 3 Ω or 20% Good hermetically	IEC68-2-1 (GB/T2423.1-2008) All Frequency tests adopt series mode
IR Reflow	Pre-Heating: 150°C to 200°C, 60-120 seconds Heating: 217°C, 60 to 150 seconds Peak temp: 260°C \pm 5°C, 20 \pm 5 seconds	Δ Freq. \leq \pm 10ppm, Δ ESR \leq \pm 3 Ω or 20% Good hermetically	JEDEC J-STD-020C All Frequency tests adopt series mode
Salt Spray	35 \pm -2°C, 5% salt spray for 24 hours	No corrosion	MIL-STD-883H Method 1009.8 Condition A All Frequency tests adopt series mode