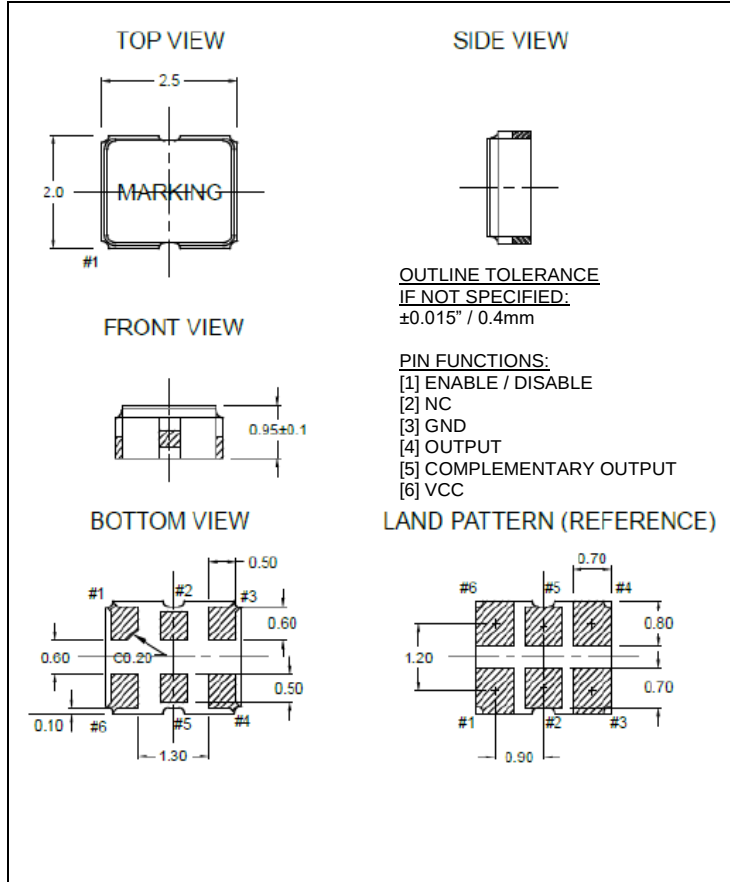


■ ELECTRICAL SPECIFICATION

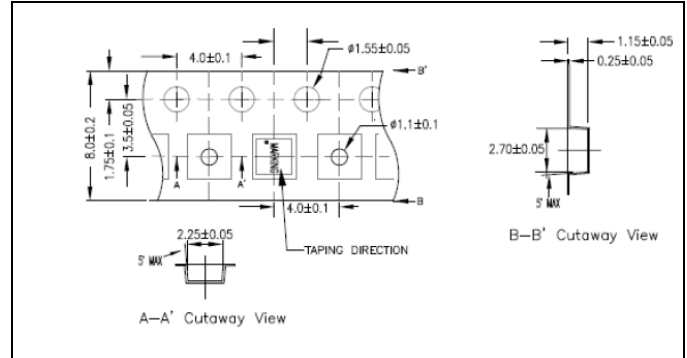
PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	f_0	$T_a = 25^\circ\text{C}$	156.250	MHz
Oscillation Mode			Fundamental	-
Supply Voltage	V_{CC}	$V_{CC} \pm 5\%$	2.5	VDC
Supply Current, typ/max			20/30	mA
Operating Temperature Range	T_a	---	-40 ~ +85	$^\circ\text{C}$
Storage Temperature Range	$T_{(stg)}$	Absolute max	-55 ~ +125	$^\circ\text{C}$
Output Logic Type	---		HCSL	
Freq. Stability, max	$\Delta f/f_0$	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load	± 50	ppm
Aging, max		First Year	± 3	ppm
Output Voltage	V_{OL}	Logic "0" Level, min	-0.15	VDC
	V_{OH}	Logic "1" Level, max	0.9	VDC
Output Load	---	To GND and $R_s = 33\Omega$ or 0Ω	50	Ω
Enable / Disable Function	E/D	Pin 1: High, Pins 4 & 5 – Oscillation (Enabled), min	$0.7 \times V_{CC}$	V
		Pin 1: Low, Pins 4 & 5 – High Impedance (Disabled), max	$0.3 \times V_{CC}$	V
Symmetry (Duty Cycle)	DC	@50% Wave Form	45 ~ 55	%
Stand by Current, max			10	μA
Differential Output Swing, min	V_{opp}		0.55	V
Rise Time and Fall Time, typ/max	t_r / t_f	@20% to 80% Wave Form	0.3/0.5	ns
Start up Time, max	t_{start}		2	ms
Jitter, RMS, typ	J	$1\sigma, 12\text{kHz} < F_j < 20\text{MHz}$	38.4	fs
Phase Noise @2.5V, typ	$\mathcal{E} (\Delta f)$	@10Hz	-74.22	dBc/Hz
		@100Hz	-104.99	
		@1kHz	-133.86	
		@10kHz	-151.62	
		@100kHz	-157.11	
		@1MHz	-161.59	
		@40MHz	-165.39	

CHF2520-156.250-2.5-50-X-T-N1

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS

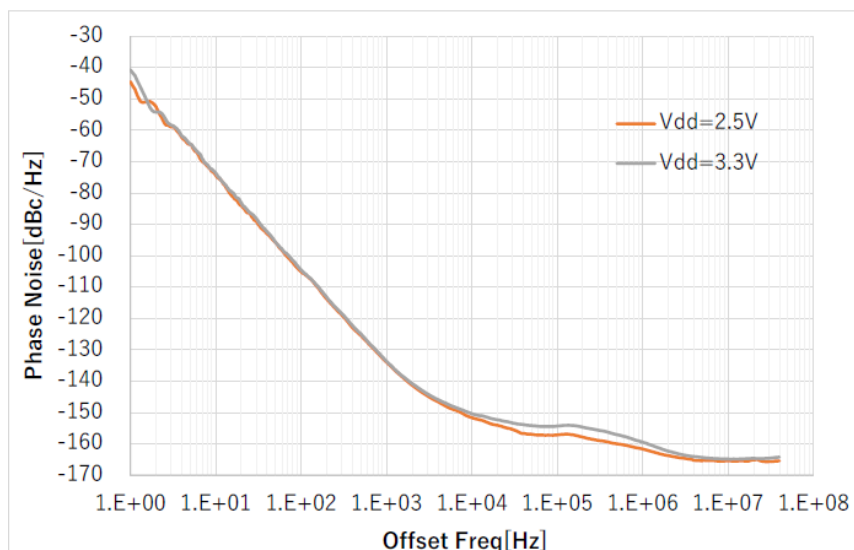


NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

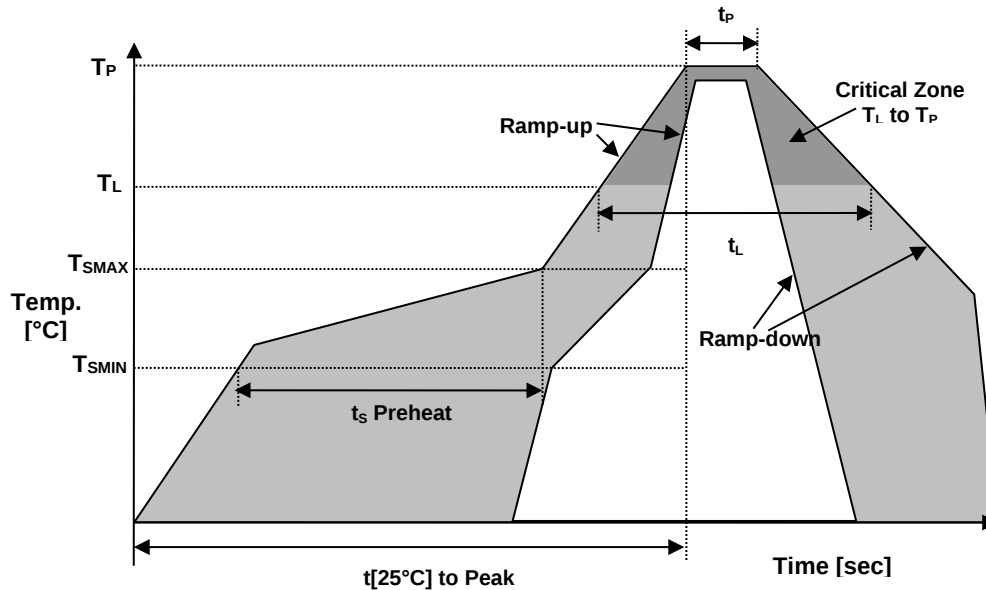
PACKAGING

180 mm REEL DIAMETER
8 mm TAPE WIDTH, 4 mm PITCH
QUANTITY: 3000 PIECES PER REEL

PHASE NOISE GRAPH



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	$t[25^\circ\text{C}] \text{ to Peak}$	480 sec.
Time	t_L	60-150 sec.

ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH-SVHC	Compliant
HALOGEN-FREE	Compliant
TERMINATION FINISH	Au



MARKING

Rxx156
•2BEyw

x – Internal Production ID code
y – Year code
w – Week code

YEAR CODE	
Year	Code
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		
18	r	36	J		

APPROVAL

RALTRON	
DRAWN BY:	JS, February 26 2025
APPROVED BY:	CP, February 26, 2025
REVISION:	A, Initial Release

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 only 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.