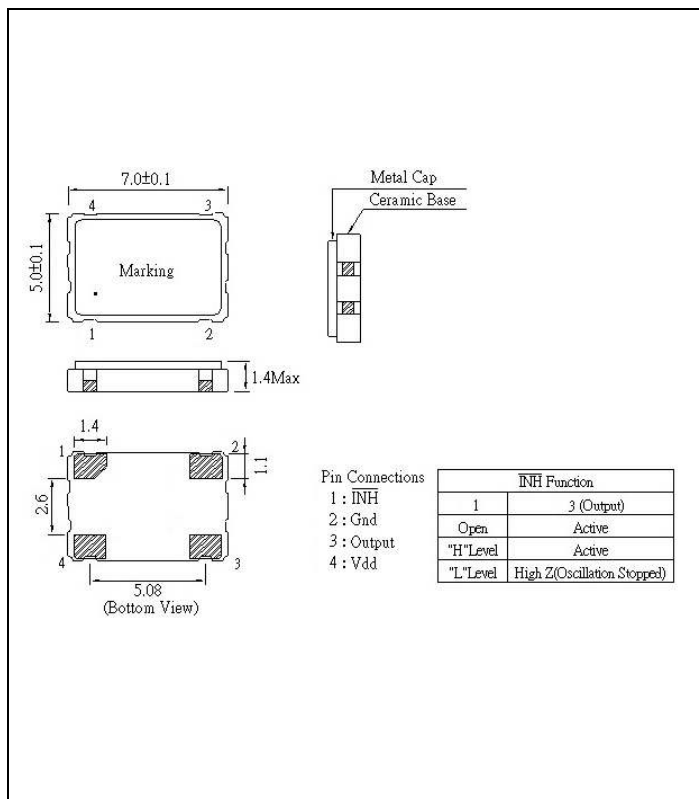


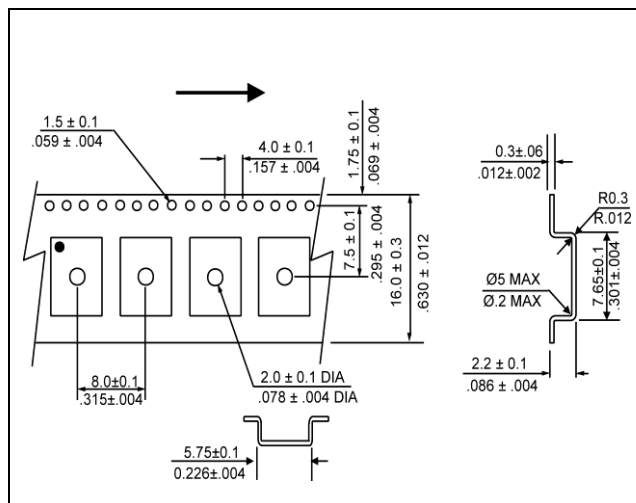
#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Frequency, nom	$f_o$		9.8304	MHz
Supply voltage, nom	Vcc	Vcc $\pm 10\%$	3.3	V
Supply Current, max	I <sub>s</sub>	T <sub>a</sub> =+25°C Load=15 pF CMOS or 5 TTL max	25	mA
Output Voltage Levels	V <sub>OH</sub> V <sub>OL</sub>	Logic 1 Logic 0	2.8 min 0.4 max	VDC VDC
Duty Cycle	DC	@ 50% of signal	40 ~ 60	%
Rise Time / Fall Time, max	tr / tf	20%~80% Vout, 80%~20% Vout,	5	ns
Start-up Time, max			10	ms
Jitter, RMS, max	J	1 $\sigma$ , 12kHz < F <sub>j</sub> < 20MHz	1	ps
Overall Freq. Stability, max	$\Delta f/f_c$	Inclusive of 25° Tolerance, Operating Temperature Range, Voltage & Load Variations and Aging	$\pm 100$	ppm
Output Enabled / Disabled	En Dis	Pin 1: High Voltage or No Connect, Pin 3 Enabled Pin 1: Ground, Pin 3 Disabled	2.2 min 0.8 max	VDC VDC
Operating Temperature Range	T <sub>a</sub>		-20 ~ +70	°C
Storage Temperature Range	T(stg)		-55 ~ +125	°C

#### MECHANICAL SPECIFICATION



OUTLINE TOLERANCE:  $\pm 0.015'' / 0.4\text{mm}$  (Unless otherwise specified)

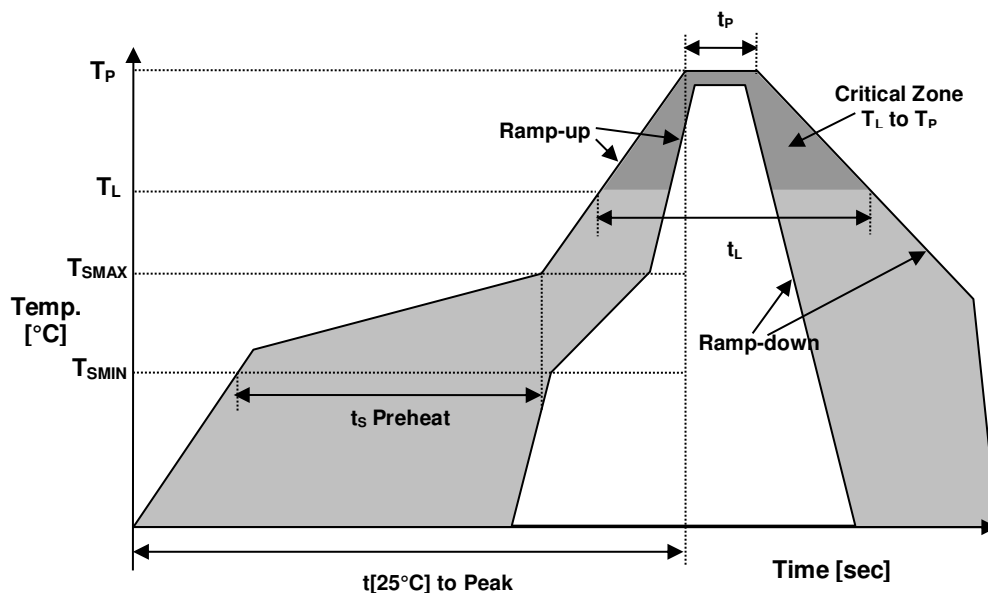


#### PACKAGING

254 mm REEL DIAMETER  
16 mm TAPE WIDTH, 8 mm PITCH  
QUANTITY: 1000 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
TERMINATION FINISH	Au
UNIT WEIGHT (grams)	0.155





A RAMI TECHNOLOGY Company

# CLOCK OSCILLATOR

Page 3 of 3

CO4310-9.8304-TR

## MARKING

Rx9.830  
•3Cyw

x – 1 or 2 digits as Internal Production ID code  
y – Year code  
w – Week code

YEAR CODE	
Year	Code
2015	5
2016	6
2017	7
2018	8
2019	9
2020	0
2021	1
2022	2
2023	3
2024	4
2025	5

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:	A, Initial Release, January 8, 2010
APPROVED BY:	A, Initial Release, January 8, 2010
REVISION:	A, Initial Release B, Updated to current spec levels by XLiu, May 7, 2020

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 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 a ll 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.