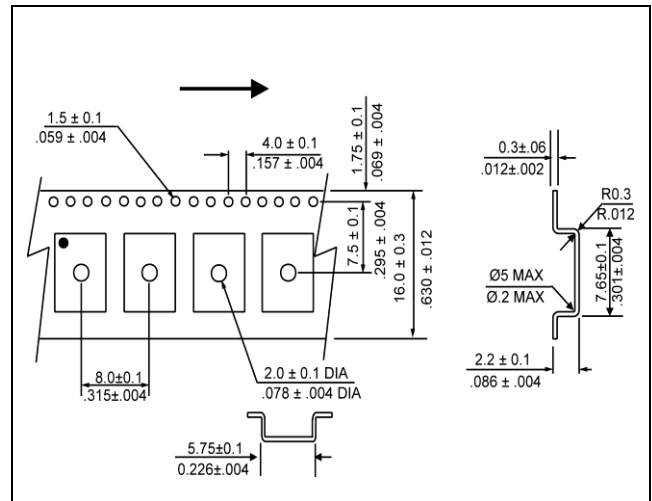
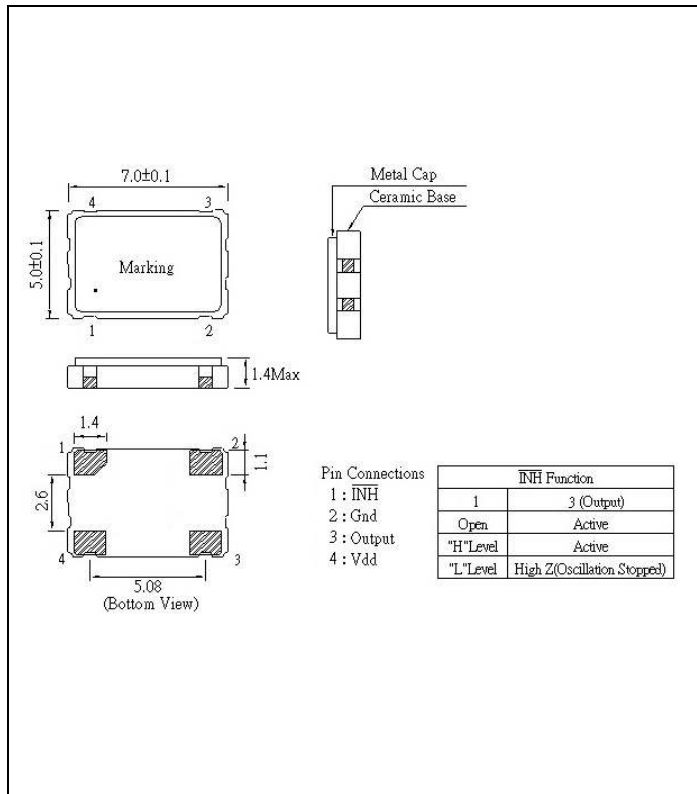


#### ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Frequency, nom	fo		12.000	MHz
Supply voltage, nom	Vcc	Vcc ±10%	5	V
Supply Current, max	Is	Ta=+25°C Load=15 pF CMOS or 5 TTL max	45	mA
Output Voltage Levels	V <sub>OH</sub> V <sub>OL</sub>	Logic 1 Logic 0	4.5 min 0.5 max	V V
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	1σ, 12kHz < F <sub>l</sub> < 20MHz	1	ps
Load			15	pF
Overall Freq. Stability, max	Δf/fc	Inclusive of 25° Tolerance, Operating Temperature Range, Voltage & Load Variations and Aging	±100	ppm
Output Enabled / Disabled	En Dis	Pin 1: High Voltage (2.2V min) or No Connect, Pin 3 Enabled Pin 1: Low (0.3V max) or Ground, Pin 3 Disabled (High Impedance)		
Operating Temperature Range	Ta		-20 ~ +70	°C
Storage Temperature Range	T(stg)		-55 ~ +125	°C

#### MECHANICAL SPECIFICATION



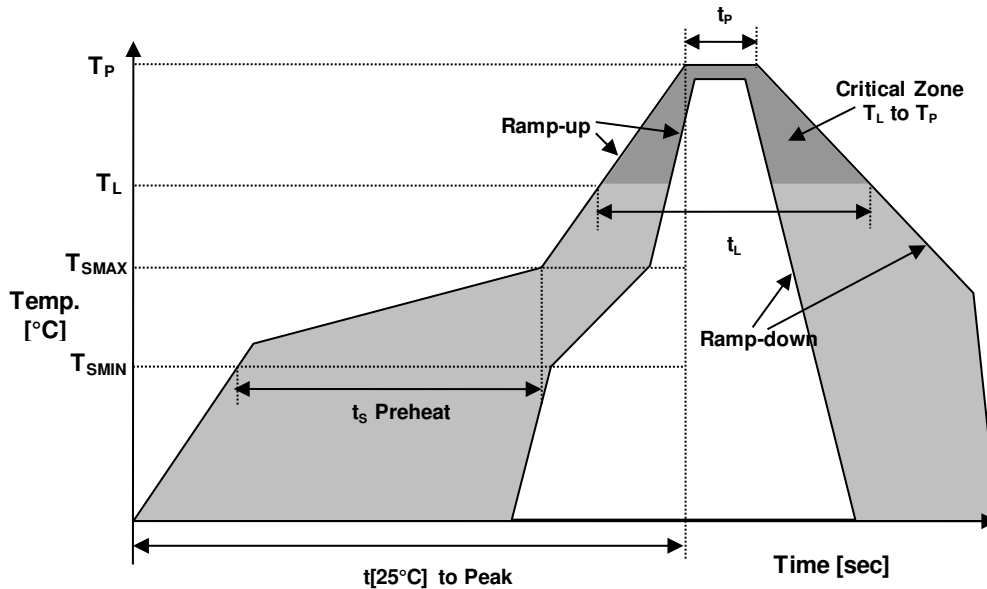
#### PACKAGING

254 mm REEL DIAMETER  
16 mm TAPE WIDTH, 8 mm PITCH  
QUANTITY: 1000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481

OUTLINE TOLERANCE: ±0.015" / 0.4mm (Unless otherwise specified)

### REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T <sub>SMIN</sub>	150°C
Temperature Max Preheat	T <sub>SMAX</sub>	200°C
Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )	t <sub>s</sub>	60-180 sec.
Temperature	T <sub>L</sub>	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/sec max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/sec max.
Time within 5°C of Peak Temperature	t <sub>p</sub>	10 sec.
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.
Time	t <sub>L</sub>	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



### MARKING

Rx12.000

•9Cyww

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:	YLi, June 5, 2020
APPROVED BY:	CP, June 5, 2020
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.