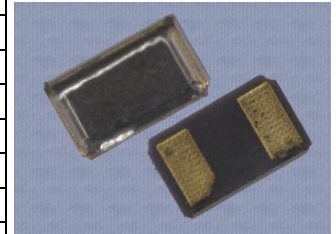
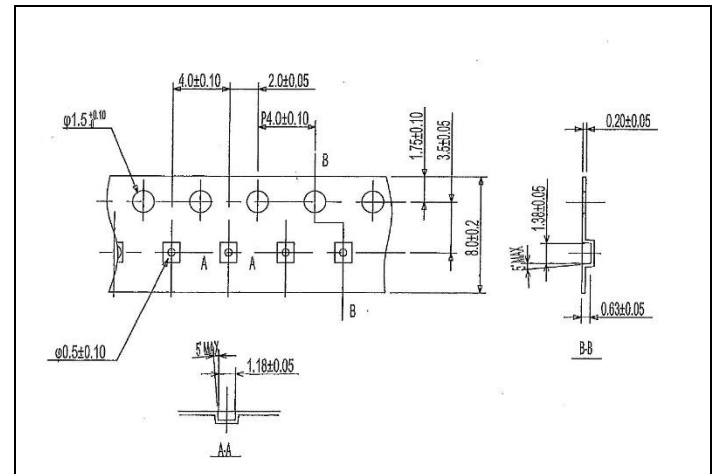
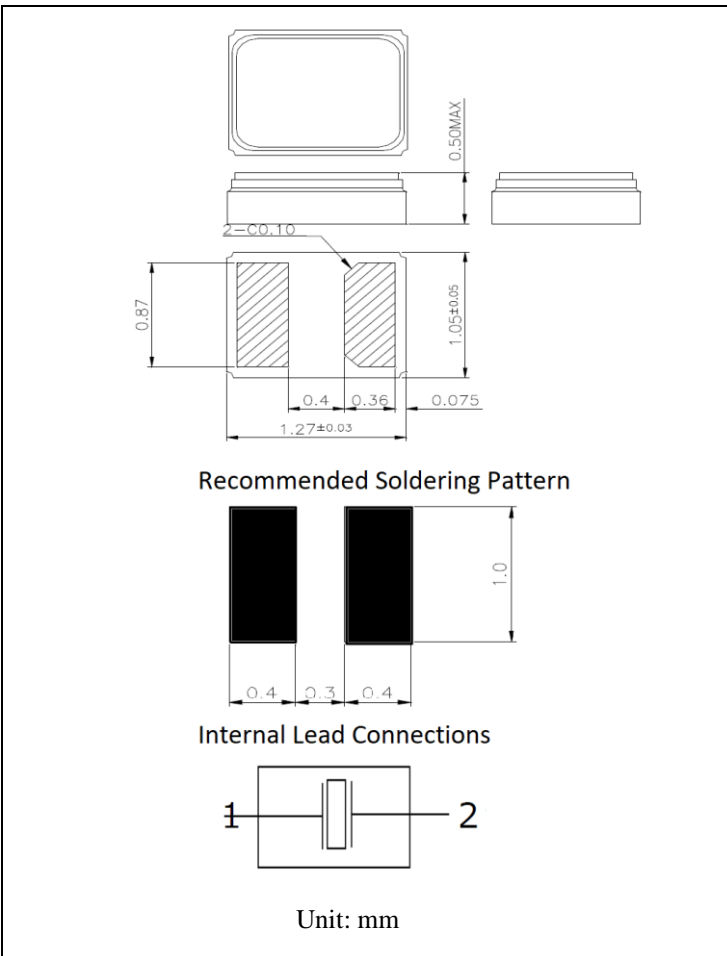


ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
FREQUENCY STABILITY OVER TEMPERATURE	-0.036 ppm / °C2
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±5 ppm first year max
LOAD CAPACITANCE	9 pF
EQUIVALENT SERIES RESISTANCE	90 kΩ max
SHUNT CAPACITANCE	1.4 pF typ
DRIVE LEVEL	0.3 μW max



MECHANICAL SPECIFICATION

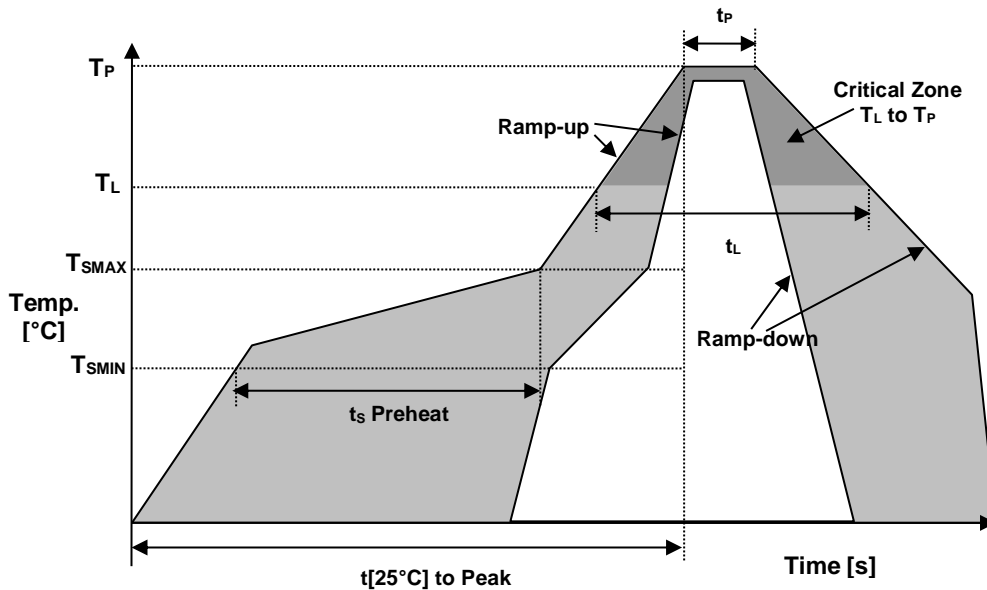


NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

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

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/s max.
Ramp-down rate	R_{DOWN}	6°C/s max.
Time within 5°C of Peak Temperature	t_p	10 s
Time $t_{[25^\circ\text{C}] \text{ to Peak Temperature}}$	$t_{[25^\circ\text{C}] \text{ to Peak}}$	480 s
Time	t_L	60-150 s

ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A





A RAMI TECHNOLOGY Company

SURFACE MOUNT TUNING FORK CRYSTAL

RT1210-32.768-9-TR

MARKING

Jyww

- 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
2029	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:	AR, October 12, 2020
APPROVED BY:	CP, October 12, 2020
REVISION:	A, Initial Release B, Updated to current spec levels by XS, Mar, 4, 2021

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 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.