

#### SURFACE MOUNT TUNING FORK CRYSTAL

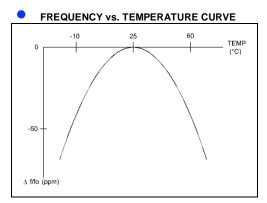
Page 1 of 3

#### RSM200S-32.768-6-TR-15PPM-NS1

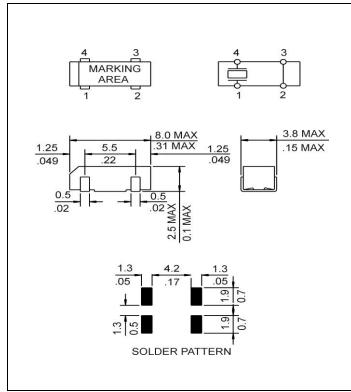
#### SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±15 ppm max
TURNOVER TEMPERATURE	+25°C ±5°C
PARABOLIC CURVATURE CONSTANT	-0.034 ±0.006 ppm/°C <sup>2</sup>
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
AGING	±3 ppm first year max
LOAD CAPACITANCE	6 pF
EQUIVALENT SERIES RESISTANCE	75 kΩ max
SHUNT CAPACITANCE	1.35 pF typ
MOTIONAL CAPACITANCE	3 fF typ
CAPACITANCE RATIO	450 typ
DRIVE LEVEL	1 μW max
INSULATION RESISTANCE	500 MΩ min
REFLOW CONDITIONS	260°C for 10 sec max

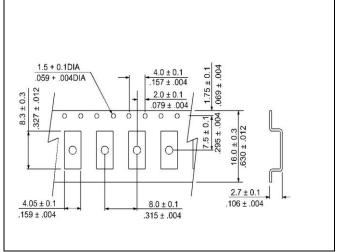




# MECHANICAL SPECIFICATION



# CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

### PACKAGING

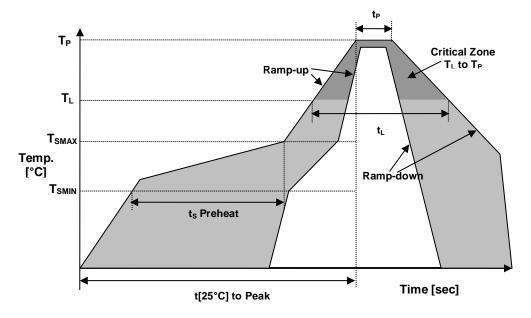
178 mm REEL DIAMETER 16 mm TAPE WIDTH, 8 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481



# RSM200S-32.768-6-TR-15PPM-NS1

### 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> )	ts	60-180 s
Temperature	TL	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/s max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/s max.
Time within 5°C of Peak Temperature	t <sub>P</sub>	10 s
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 s
Time	tL	60-150 s

## ENVIRONMENTAL

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





#### SURFACE MOUNT TUNING FORK CRYSTAL

Page 3 of 3

## RSM200S-32.768-6-TR-15PPM-NS1

#### MARKING

x36myR

 $\label{eq:code} \begin{array}{l} x-Internal\ Production\ ID\ code \\ m-Month\ code \end{array}$ 

y – Year code

MONTH CODE		
MONTH	CODE	
JANUARY	Α	
FEBRUARY	В	
MARCH	С	
APRIL	D	
MAY	Е	
JUNE	F	
JULY	G	
AUGUST	Н	
SEPTEMBER	J	
OCTOBER	K	
NOVEMBER	L	
DECEMBER	М	

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

### APPROVAL

Drawn By:	A, Initial Release, February 17, 2014
Approved By:	A, Initial Release, February 17, 2014
Revision:	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 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.