#### SURFACE MOUNT MICROPROCESSOR CRYSTAL

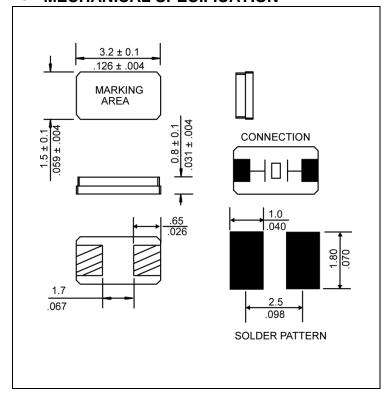
Page 1 of 3

# RT3215-32.768-12.5-TR-10PPM

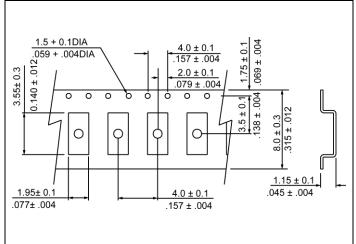
## SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±10 ppm max
TURNOVER TEMPERATURE	+25 ±5°C
TEMPERATURE COEFFICIENT	-0.04 x 10 <sup>-6</sup> / °C <sup>2</sup> max
SHUNT CAPACITANCE	1.5 pF typ
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	70 KΩ max
DRIVE LEVEL	0.5 μW max
AGING	±3 ppm first year max
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C
MOTIONAL CAPACITANCE	6.7 fF typ
INSULATION RESISTANCE	500 MΩ max

# MECHANICAL SPECIFICATION



## CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

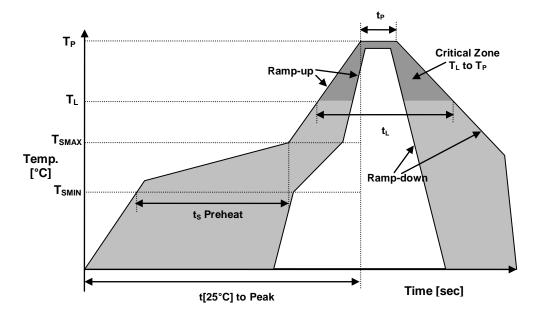
#### PACKAGING

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

IN ACCORDANCE WITH EIA-481

# Page 2 of 3 RT3215-32.768-12.5-TR-10PPM

## 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 sec.
Temperature	$T_L$	217°C
Peak Temperature	T <sub>P</sub>	230°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
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au





## SURFACE MOUNT MICROPROCESSOR CRYSTAL

Page 3 of 3

# RT3215-32.768-12.5-TR-10PPM

#### MARKING

R3xym

x - Internal Production ID code

y - Year code

m - Month 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 MONTH CODE TABLE		
Month	Code	
January	A	
February	В	
March	C	
April	D	
May	E	
June	F	
July	G	
August	H	
September	J	
October	K	
November	L	
December	M	

#### APPROVAL

Revision:	A Initial Release
Approval By:	KJackson
Date:	June 18, 2015
	Updated to current
	spec levels KJ 5/1/17

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 charge, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or rue 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.