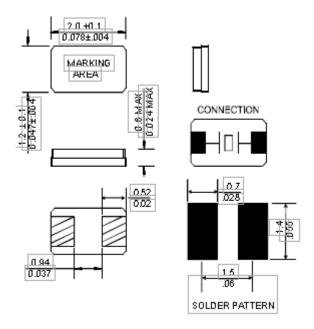


RT2012-32.768-12.5-TR

ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	±20 ppm max
TURNOVER TEMPERATURE	25°C ± 5°C
PARABOLIC CURVATURE CONSTANT	-0.034 ppm/°C ²
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	90 kΩ max
DRIVE LEVEL	1.0 μW max
SHUNT CAPACITANCE	1.5 pF max
AGING (FIRST YEAR)	±3 ppm/year max
INSULATION RESISTANCE	500M Ω min
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-55°C to +125°C

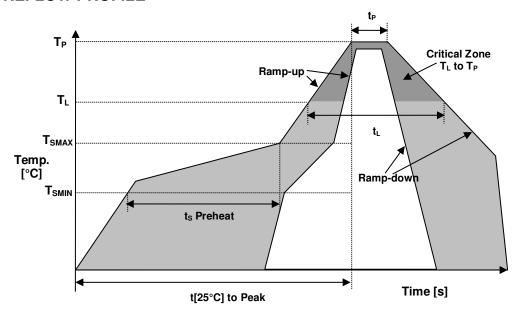
MECHANICAL SPECIFICATION





RT2012-32.768-12.5-TR

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₽	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	5/6 Compliant, Exemption 7a
REACH SVHC	Compliant
HALOGEN-FREE	Compllant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Sn





TUNING FORK CRYSTAL

Page 3 of 3

RT2012-32.768-12.5-TR

APPROVAL

DRAWN BY:	LP, October 04, 2017
APPROVED BY:	JI, October 04, 2017
REVISION:	A, Initial Release
	Updated to current spec
	levels KJ 6/25/19

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 ech 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.