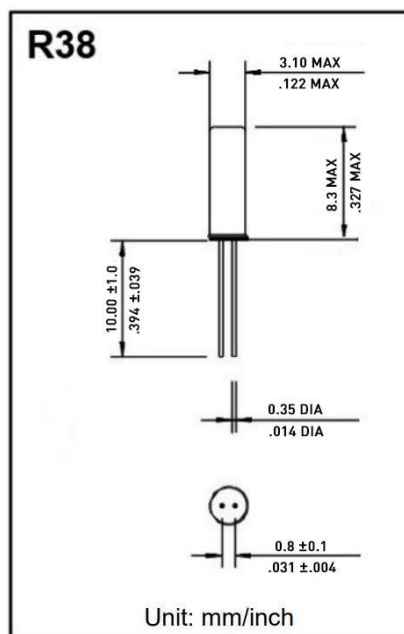


● ELECTRICAL SPECIFICATIONS

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/Δ°C ²
LOAD CAPACITANCE	12.5 pF
EQUIVALENT SERIES RESISTANCE	35 kΩ max
DRIVE LEVEL	1.0 μW typ
MOTIONAL CAPACITANCE	0.0035 pF typ
SHUNT CAPACITANCE	1.6 pF typ
CAPACITANCE RATIO	460 typ
AGING	±3 ppm first year max
QUALITY FACTOR TYP	90000 typ
INSULATION RESISTANCE	500 MΩ min
OPERATING TEMPERATURE RANGE	-20°C to +70°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C
SHOCK RESISTANCE	±5 ppm max 75 cm drop test in onto a hard wood surface

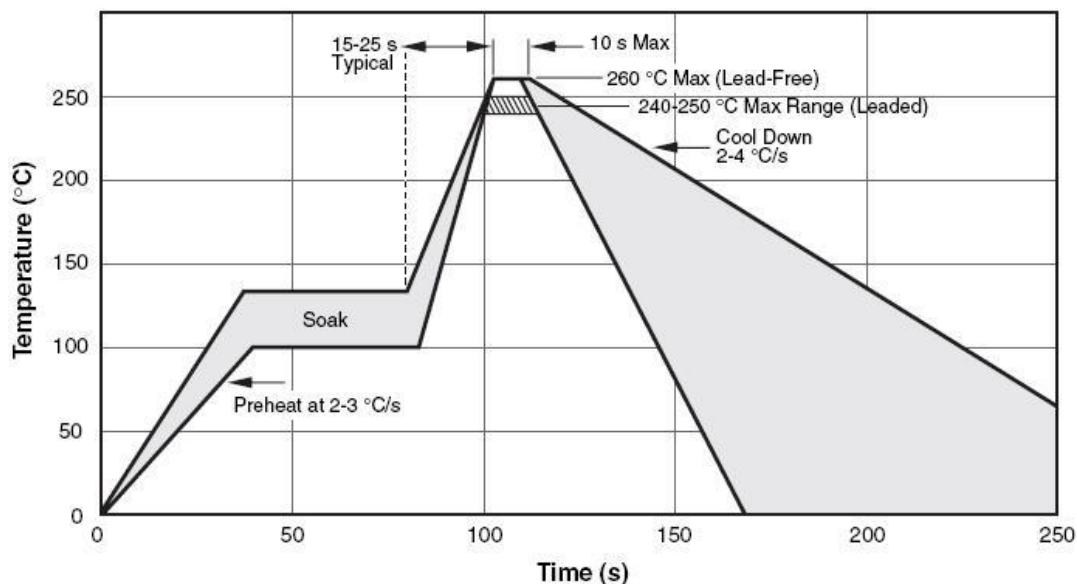
● MECHANICAL SPECIFICATION



NOTE: Through hole device, can withstand 245°C soldering by terminals only

● WAVE SOLDER PROFILE

TYPICAL WAVE SOLDER PROFILE FOR LEADED AND LEAD-FREE THROUGH-HOLE PACKAGES



Wave Solder profile		
Profile Feature	SnPb eutectic	Pb-Free
Average ramp-up rate	~200°C/second	~200°C/second
Heating Rate during preheat	typical 1-2°/second max 4°/second	typical 1-2°/second max 4°/second
Final preheat temperature, T_s	~130°C	~130°C
Peak temperature, T_p	235°C	260°C
Time within +0°C / -5°C of actual temperature, t_p	10 seconds	10 seconds
Ramp-down rate	5°C/second max.	5°C/second max.

NOTE: This document should serve as recommendation only. Other parameters may also affect soldering, this profile does not guarantee absolute success. Soldering profile should be determined by the equipment manufacturer and customers' process engineer.

● ENVIRONMENTAL

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



● **APPROVAL**

DRAWN BY:	CP, June 04, 2015
APPROVED BY:	CP, June 04, 2015
REVISION:	A, Initial Release
	B Updated to current spec levels JH 8/20/19
	C. Updated to current spec level AG 3/19/2020

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.