

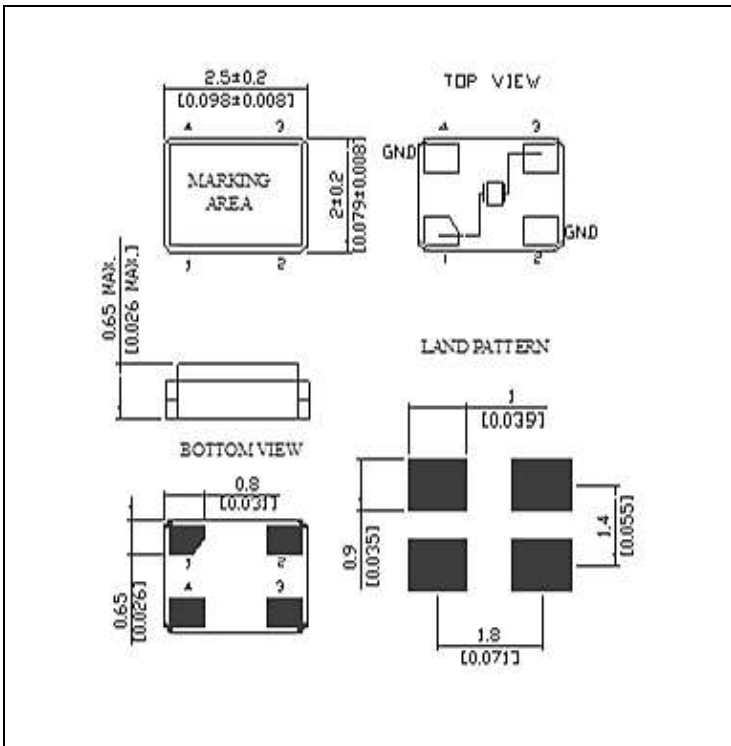
■ **SPECIFICATIONS**

| PARAMETER                            | VALUE  |
|--------------------------------------|--|
| NOMINAL FREQUENCY                    | 32.000 MHz   |
| MODE OF OSCILLATION                  | Fundamental  |
| FREQUENCY TOLERANCE AT 25°C          | ±10 ppm max  |
| FREQUENCY STABILITY OVER TEMPERATURE | ±10 ppm max  |
| OPERATING TEMPERATURE RANGE          | -30°C to +70°C ⇐                                     |
| STORAGE TEMPERATURE RANGE            | -40°C to +85°C                                       |
| LOAD CAPACITANCE                     | 10 pF  |
| AGING                                | ±3 ppm per year max                                  |
| EQUIVALENT SERIES RESISTANCE         | 40 Ω max ⇐   |
| SHUNT CAPACITANCE                    | 3.5 pF max   |
| UNWANTED MODE                        | From Fn to Fn +500kHz                                |
| Rp/R1                                | 2 min  |
| G-SENSITIVITY                        | 2 ppb/G max  |
| DRIVE LEVEL                          | 100 μW max   |
| SHOCK RESISTANCE                     | ±5 ppm max, 75 cm drop test onto a hard wood surface |
| REFLOW CONDITIONS                    | 260°C for 10 sec max                                 |

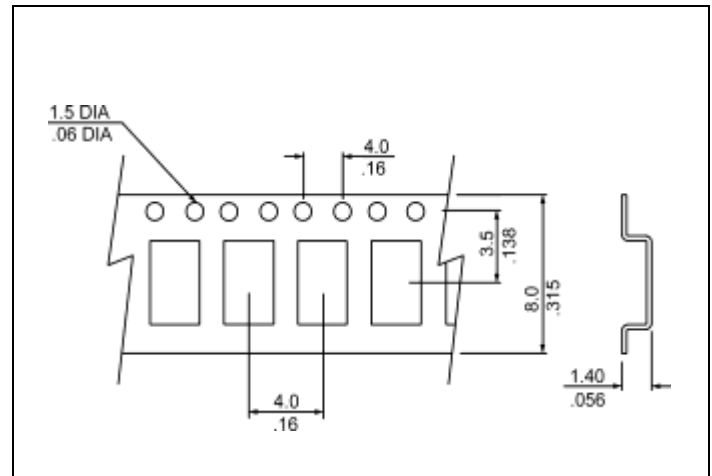


Photo is not actual part

**MECHANICAL SPECIFICATION**



**CARRIER TAPE DIMENSIONS**



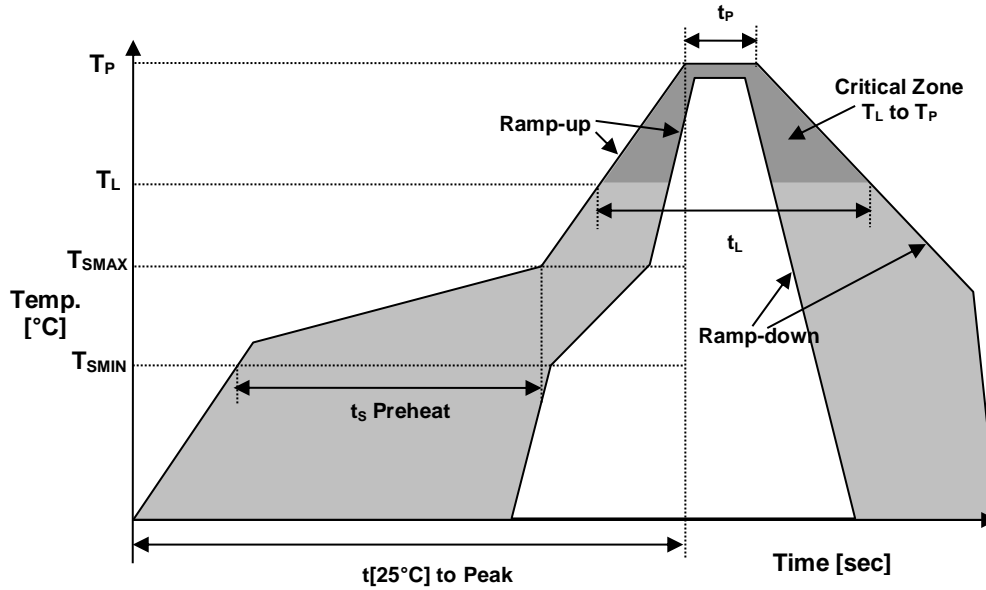
NOTE: REFER TO EIA-481 FOR DIMENSIONS

● **PACKAGING**

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

IN ACCORDANCE WITH EIA-481

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



• MARKING

R32.00  
xxKEyw

xx – Internal Production ID code  
y – Year code  
w – Week code

| YEAR CODE |      |
|-----------|------|
| Year      | Code |
| 2011      | 1    |
| 2012      | 2    |
| 2013      | 3    |
| 2014      | 4    |
| 2015      | 5    |
| 2016      | 6    |
| 2017      | 7    |
| 2018      | 8    |
| 2019      | 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    | KJackson, August 29, 2017         |
| APPROVED BY | Jlvens, August 29, 2017           |
| REVISION    | A, Initial Release                |
|             | B, Updated marking code KJ 4/4/19 |

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 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.