

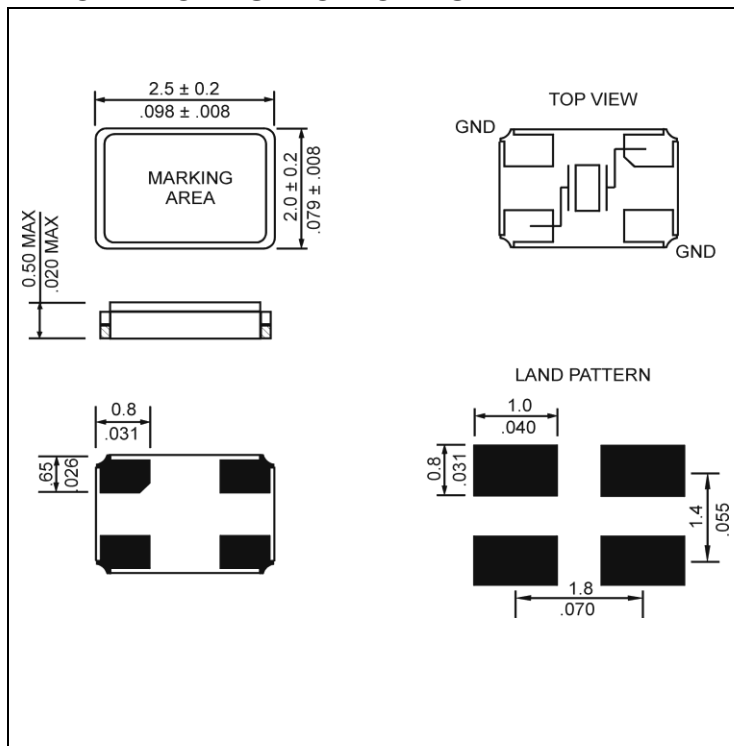
SPECIFICATIONS

| PARAMETER | VALUE |
|--------------------------------------|---|
| NOMINAL FREQUENCY | 54.000 MHz |
| MODE OF OSCILLATION | Fundamental |
| FREQUENCY TOLERANCE AT 25°C | ±6 ppm max |
| FREQUENCY STABILITY OVER TEMPERATURE | ±9 ppm max (Flat temperature curve between 25°C and 60°C) |
| OPERATING TEMPERATURE RANGE | -30°C to +85°C ↔ |
| STORAGE TEMPERATURE RANGE | -40°C to +85°C |
| AGING, FIRST YEAR | ±1 ppm max ↔ |
| TOTAL STABILITY | ± 20 ppm ↔ |
| LOAD CAPACITANCE | 19 pF |
| EQUIVALENT SERIES RESISTANCE | 15 Ω max ↔ |
| SHUNT CAPACITANCE | 1.5 ± 25% pF ↔ |
| PULLING SENSITIVITY, MAX | 3.5 ppm/pF ± 15% (at CL: 19pF) ↔ |
| DRIVE LEVEL | 350 μW max |
| SHOCK RESISTANCE | ±5 ppm max 75 cm drop test onto a hard wood surface |
| REFLOW CONDITIONS | 260°C ±5°C for 10 sec max |

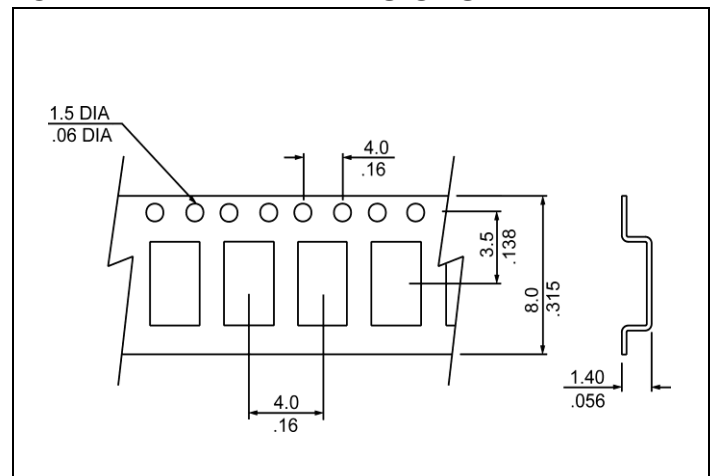


Photo is not actual part

MECHANICAL SPECIFICATION



CARRIER TAPE DIMENSIONS

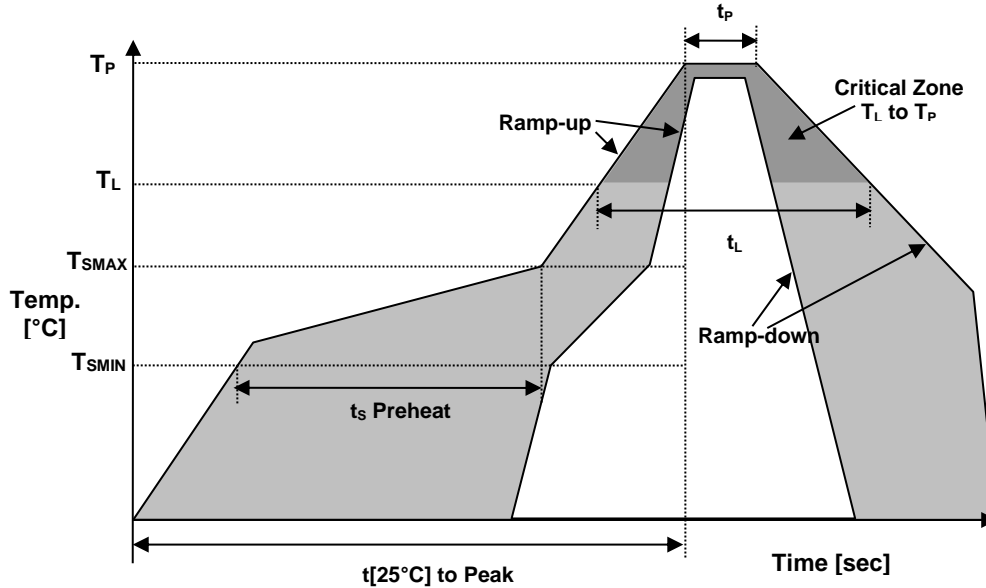


NOTE: REFER TO EIA-481 FOR DIMENSIONS

● 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

R54.00
xxJyw

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 | CP, August 09, 2017 |
| APPROVED BY | JI, August 09, 2017 |
| REVISION | A, Initial Release |
| | |

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