

• 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 ±0.015 ppm/°C ² |
| LOAD CAPACITANCE | 12.5 pF |
| EQUIVALENT SERIES RESISTANCE | 50 kΩ max |
| DRIVE LEVEL | 0.1 μW typ |
| SHUNT CAPACITANCE | 1.4 pF typ, 3pF max |
| AGING | ±5 ppm per year max |
| INSULATION RESISTANCE | 500 MΩ min @ DC 100V |
| OPERATING TEMPERATURE RANGE | -40°C to +85°C |
| STORAGE TEMPERATURE RANGE | -40°C to +85°C |

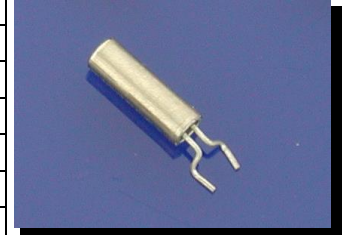
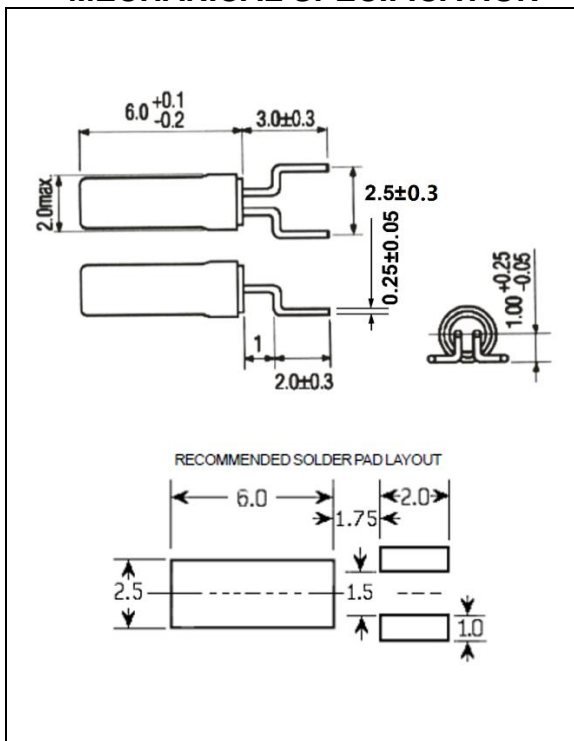
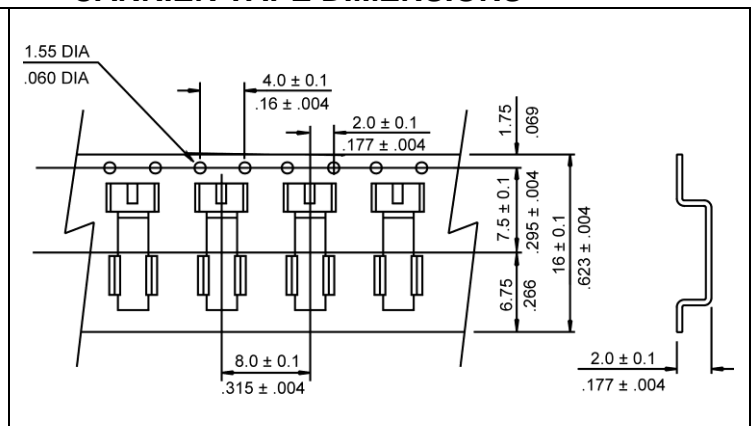


Photo is not actual part

• MECHANICAL SPECIFICATION



• CARRIER TAPE DIMENSIONS



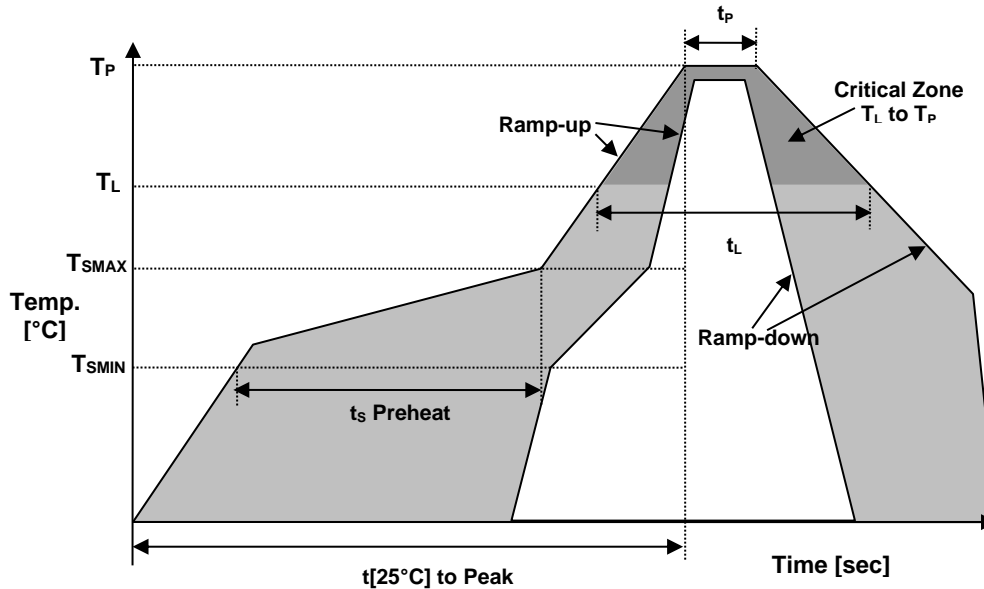
NOTE: REFER TO EIA-481 FOR DIMENSIONS

• PACKAGING

330 mm REEL DIAMETER
 16 mm TAPE WIDTH, 8 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

x3FmyR

x – 1 or 2 digits as Internal Production ID code

m – Month code

y – Year code

| YEAR CODE | |
|-----------|------|
| Year | Code |
| 2018 | 8 |
| 2019 | 9 |
| 2020 | 0 |
| 2021 | 1 |
| 2022 | 2 |
| 2023 | 3 |
| 2024 | 4 |
| 2025 | 5 |
| 2026 | 6 |
| 2027 | 7 |
| 2028 | 8 |
| 2029 | 9 |

| MONTH CODE | |
|------------|------|
| MONTH | CODE |
| JANUARY | A |
| FEBRUARY | B |
| MARCH | C |
| APRIL | D |
| MAY | E |
| JUNE | F |
| JULY | G |
| AUGUST | H |
| SEPTEMBER | J |
| OCTOBER | K |
| NOVEMBER | L |
| DECEMBER | M |

APPROVAL

| | |
|--------------|---|
| DRAWN BY: | KJackson, July 29, 2015 |
| APPROVED BY: | KJackson, July 29, 2015 |
| REVISION: | A, Initial Release B, CP August 8, 2016 Changed Pins Material C, Updated to current spec levels by XLiu, March 12, 2021 D, Updated the Mechanical Specification by AR, May 09, 2022 E, Updated the Mechanical Specification by AR, May 17, 2022 F, Updated the mechanical specification by XLiu, September 8, 2023 |

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