



RT2012-32.768-9-20-EXT-TR

SPECIFICATIONS

| PARAMETER | VALUE |
|------------------------------|-----------------------------------|
| NOMINAL FREQUENCY | 32.768 kHz |
| MODE OF OSCILLATION | Fundamental |
| FREQUENCY TOLERANCE AT 25°C | ±20 ppm max |
| TURNOVER TEMPERATURE | 25°C ± 5°C |
| PARABOLIC CURVATURE CONSTANT | -0.03 ±0.01 ppm / °C ² |
| OPERATING TEMPERATURE RANGE | -40°C to +85°C |
| STORAGE TEMPERATURE RANGE | -55°C to +125°C |
| AGING | ±3 ppm first year max |
| LOAD CAPACITANCE | 9 pF |
| EQUIVALENT SERIES RESISTANCE | 90 kΩ max |
| SHUNT CAPACITANCE | 1.5 pF max |
| DRIVE LEVEL | 0.5 μW typ |
| REFLOW CONDITIONS | 260°C for 10 sec max |
| INSULATION RESISTANCE | 500 MΩ min @ DC 100V |

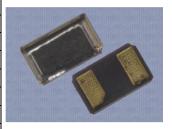
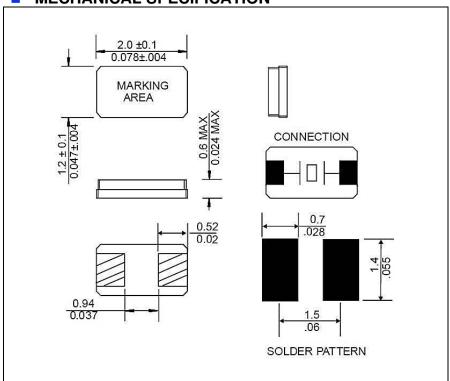


Photo is not actual part

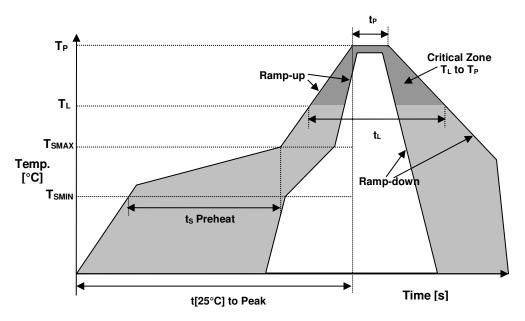
MECHANICAL SPECIFICATION





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REFLOW PROFILE



| Reflow profile | | |
|--|-------------------|-------------|
| Temperature Min Preheat | T _{SMIN} | 150°C |
| Temperature Max Preheat | T _{SMAX} | 200°C |
| Time (T _{SMIN} to T _{SMAX}) | ts | 60-180 sec. |
| Temperature | TL | 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 _P | 10 s |
| Time t[25°C] to Peak Temperature | t[25°C] to Peak | 480 s |
| Time | t _L | 60-150 s |

ENVIRONMENTAL

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



APPROVAL

| DRAWN BY: | LP, August 09, 2016 |
|--------------|---|
| APPROVED BY: | CP, August 09, 2016 |
| REVISION: | A, Initial Release |
| | B, Updated to current spec levels KJ 10/12/18 |
| | C. Updated to current spec levels XL 3/2/20 |

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