

SURFACE MOUNT MICROPROCESSOR CRYSTAL

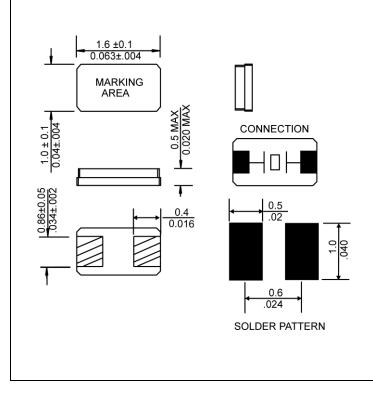
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RT1610-32.768-12.5-TR

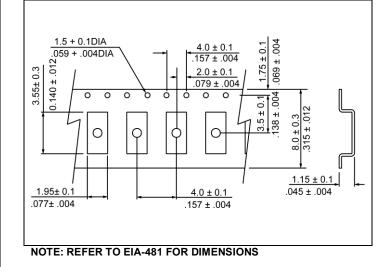
SPECIFICATIONS

| PARAMETER | VALUE |
|------------------------------|---|
| NOMINAL FREQUENCY | 32.768 kHz |
| MODE OF OSCILLATION | Fundamental |
| FREQUENCY TOLERANCE AT 25°C | ±20 ppm max |
| TEMPERATURE COEFFICIENT | -0.045 x 10 ⁻⁶ / °C ² max |
| TURNOVER TEMPERATURE | +25°C ±5°C |
| OPERATING TEMPERATURE RANGE | -40°C to +85°C |
| STORAGE TEMPERATURE RANGE | -55°C to +125°C |
| AGING | ±3 ppm first year max |
| LOAD CAPACITANCE | 12.5 pF |
| EQUIVALENT SERIES RESISTANCE | 90 kΩ max |
| SHUNT CAPACITANCE | 2 pF max |
| DRIVE LEVEL | 0.1 µW max |
| INSULATION RESISTANCE | 500 MΩ min @ DC 100V |

MECHANICAL SPECIFICATION



• CARRIER TAPE DIMENSIONS



PACKAGING

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

IN ACCORDANCE WITH EIA-481

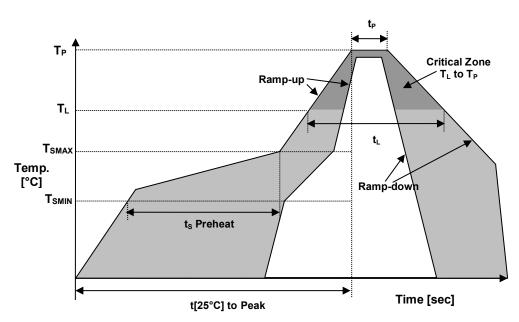


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• REFLOW PROFILE

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| 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/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°C] to Peak Temperature | t[25°C] to Peak | 480 sec. |
| Time | tL | 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 |



APPROVAL

| Drawn By: | FP, 09 April 2014 |
|--------------|---|
| Approved By: | FP, 09 April 2014 |
| Revision: | A, Initial Release B, Updated to current spec levels KJ 9/25/17 Updated to current spec levels by JH 10/14/2019 Corrected the ESR Value CP 12/03/2019 C, Updated to current spec levels by XL 6/17/2020 |

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