

RoHS
Compliant



Specifications:

Electrical Parameters:

| No | Description | Contents |
|----|--|---------------------|
| 1 | Holder Type | MCRSD16000F183000RR |
| 2 | Nominal Frequency | 16MHz |
| 3 | Oscillation Mode | AT-FUND |
| 4 | Load Capacitance | 18pF |
| 5 | Frequency Tolerance at 25°C ±3°C | ±30ppm |
| 6 | Frequency Tolerance in Operating Temperature Range | ±30ppm |
| 7 | Operating Temperature Range | -20°C to +70°C |
| 8 | Storage Temperature Range | -40°C to +85°C |
| 9 | Equivalent Series Resistance | ≤40Ω |
| 10 | Drive Level | ≤100μW |
| 11 | Shunt Capacitance | ≤5pF |
| 12 | Insulation Resistance | ≥500MΩ |
| 13 | Test Impedance Meter | KH1200 |
| 14 | Aging | ±3ppm/Year |

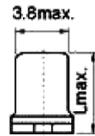
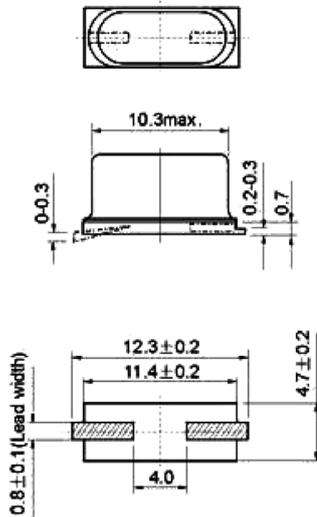
Physical & Environmental Parameters:

| No | Description | Contents | Requirements |
|----|-------------------------------|---|--|
| 1 | Lead Strength Lead Bending | Force of 0.9 kg is applied for 10±1 seconds to each lead in axial direction. Firmed the terminal up to 2mm, lead shall be subjected to withstand against 90° bending its stem. This operation shall be done toward both direction. | No mechanical damage and the measured values shall meet electrical parameters. |
| 2 | Vibration | 10 ~ 500Hz, 0.75mm amplitude, in 3 directions duration of 2h. Measurement taken after 1 hour. | |
| 3 | Random Dropping | The crystal will be test by natural dropping to 3cm wooden broad 3 times from high of 75cm. | |
| 4 | Solder Stability | Dipped the terminals no closer than 2mm into the solder bath at 235°C ±5°C for 2 ±0.5 sec. | At least 95% of the terminal surface shall be coated by the solder |
| 5 | Resistance Solder Heat | Use a 350°C ±10°C solder iron to touch device under test at the 2 ~ 2.5mm end part of lead for 10 ±1 seconds. Measurement taken after DUT being left at room temperature for at least 1 hours. | Measured values shall meet electrical parameters. |
| 6 | Temperature Cycle Shock | Temperature cycling from -40°C (30mins) to +85°C (30mins) was performed 3 times, then placed in a natural condition for 24 ±2 hours. | |
| 7 | Life Test (High Temperature) | Placed in a chamber (125°C ±2°C) for 72 hours, then placed in a natural condition for 24 ±2 hours. | |
| 8 | Life Test (Low Temperature) | Placed in a chamber (-55°C ±2°C) for 72 hours, then placed in a natural condition for 24 ±2 hours. | |
| 9 | Humidity | Placed in a chamber (Humi: 90% ~ 95% RH, Temp: 40°C ±2°C) for 96 hours, then placed in a natural condition for 24 ±2 hours. | |

Crystal Resonator



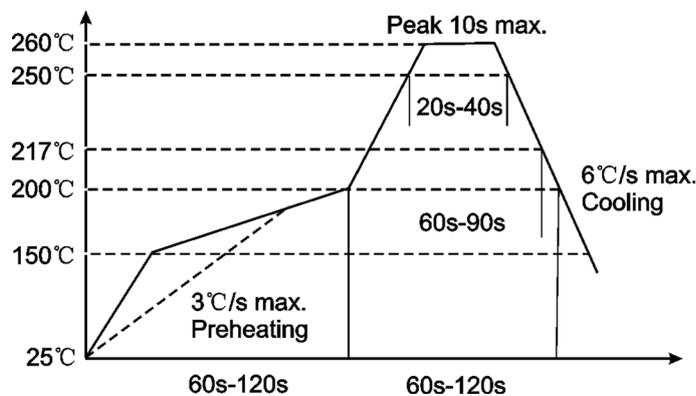
Dimensions:



| Part Number | L Max. |
|---------------------|--------|
| MCRSD16000F183000RR | 4.3 |

Dimensions : Millimetres

Reflow Profile:



Part Number Table

| Description | Part Number |
|-------------------|---------------------|
| Crystal Resonator | MCRSD16000F183000RR |

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