# **Crystal Resonator**



RoHS Compliant



## **Specifications:**

### **Electrical Parameters:**

No	Description	Contents
1	Holder Type	MCRSD25000F183000RR
2	Nominal Frequency	25MHz
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

# **Crystal Resonator**



## **Physical & Environmental Parameters:**

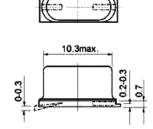
No	Description	Contents	Requirements	
1	Lead Strength Lead Bending	Force of 0.9kg is applied for 10 ±1seconds to each lead in axial direction.  Firmed the terminal up to 2mm, lead shall be subjected to withstand against 90° bending its stem. This operation shall be done toward both direction.	No mechanical damage and	
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 1hours.		
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.	Measured values shall meet electrical parameters.	
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.		



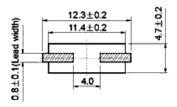
## **Crystal Resonator**



#### **Dimensions:**



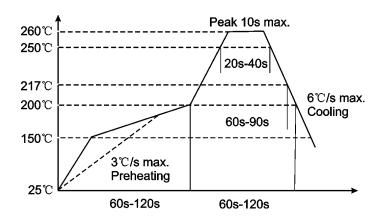




Part Number	L Max.
MCRSD25000F183000RR	4.3

Dimensions: Millimetres

#### **Reflow Profile:**



### **Part Number Table**

Description	Part Number	
Crystal Resonator	MCRSD25000F183000RR	

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