## **Crystal Resonator**

# multicomp

### RoHS Compliant



#### **Specifications:**

#### **Electrical Parameters:**

No	Description	Contents
1	Holder Type	MCRSD03686F183000RR
2	Nominal Frequency	3.6864MHz
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	≤80Ω
10	Drive Level	≤100µW
11	Shunt Capacitance	≤5pF
12	Insulation Resistance	≥500MΩ
13	Test Impedance Meter	KH1200
14	Aging	±3ppm/Year

www.element14.com www.farnell.com www.newark.com





#### **Physical & Environmental Parameters:**

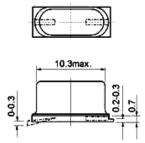
No	Description	Contents	Requirements	
1	Lead Strength Lead Bending	Force of 0.9kg is applied for 10 ±1seconds to each lead in axial direction. Firmed the terminal up to 2mm, lead shall be subjected to withstand against 90° bending its stem. This operation shall be done toward both direction.	No mochanical damage and	
2	Vibration	10 ~ 500Hz, 0.75mm amplitude, in 3 directions duration of 2h. Measurement taken after 1 hour.	No mechanical damage and the measured values shall meet electrical parameters.	
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 $235^{\circ}$ C $\pm 5^{\circ}$ C for 2 $\pm 0.5$ 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 ( $125^{\circ}C \pm 2^{\circ}C$ ) 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 $\pm$ 2°C) for 72 hours, then placed in a natural condition for 24 $\pm$ 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.		

www.element14.com www.farnell.com www.newark.com

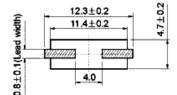




#### **Dimensions:**



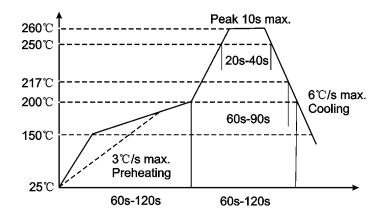




Part Number	L Max.
MCRSD03686F183000RR	4.3

Dimensions : Millimetres

#### **Reflow Profile:**



#### Part Number Table

Description	Part Number
Crystal Resonator	MCRSD03686F183000RR

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheets hould check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.

www.element14.com www.farnell.com www.newark.com

