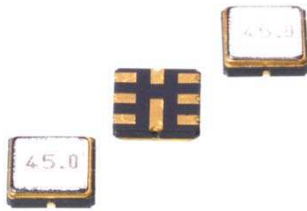


# Monolithic Crystal Filters (MCF)

Highs tability  
Ceramic Package  
Small&Thin

Pb-free : RoHs compliance



## MC-3838C3-45M10 -109M10, -130M10

### ■ Typical applications

- Mobile Telecommnuication, Base Station, GPS, etc

### ■ Features

- 45 to 150 MHz.
- 3 Pole.
- It is excellent in an impact in the miniature type.
- Package : Metal lid + Ceramic base.  
3.8×3.8×1.2 mm

### ■ Specifications

Model	MC-3838C3-45M10	MC-3838C3-109M10	MC-3838C3-130M10
Nominal Frequency	45.000 MHz	109.650 MHz	130.000 MHz
Pole	3 Pole	3 Pole	3 Pole
Pass Band	3 dB : ±10 KHz min.	0.5dB : ±10 KHz min.	0.5dB : ±10 KHz min.
Attenuation Band	30dB : ±60 KHz max.	22 dB : ±60 KHz max.	10 dB : ±25 KHz max.
Ripple	1.0dB max.	0.5dB max.	0.5dB max.
Loss	3.5dB max.	2.5dB max.	3.0dB max.
Attenuation Band	70dB min.:Fo-900KH	-	70dB min.:Fo-900KHz
Spurious	15dB max.	10dB max.	10dB max.
Termina Impedance	910Ω // 1.5pF	2000Ω // -0.6pF	870Ω // -1.5pF
Operating Temperture	-20 to +70° C		

### ■ Environmental Characteristics

Description	Specification
Fall Shock	Test : 3 time free drop onto concrete board from 150cm high Result: ±5.0 ppm max.
Vibration Shock	Test : Freq. 5-500Hz, Amplitude 1.5mm, Test time 4cycles/XYZ axis Result: ±5.0 ppm max.
Solderability	Test : Immersed into solder bath at 235±° C for 3 sec. Result: More than 95%
Humidity	Test : 90 to 95%RH at 60±3° C±500 hours Result: ±5.0 ppm max.
Reflow Heat	Test : 2 times of IR reflow soldering in accordance with reflow temerature profil as per the document No.:TR-( Result: ±5.0 ppm max.

### ■ Outline Drawing & Suggested Pa

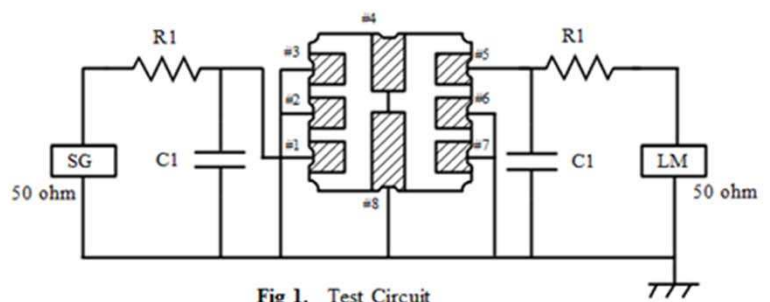
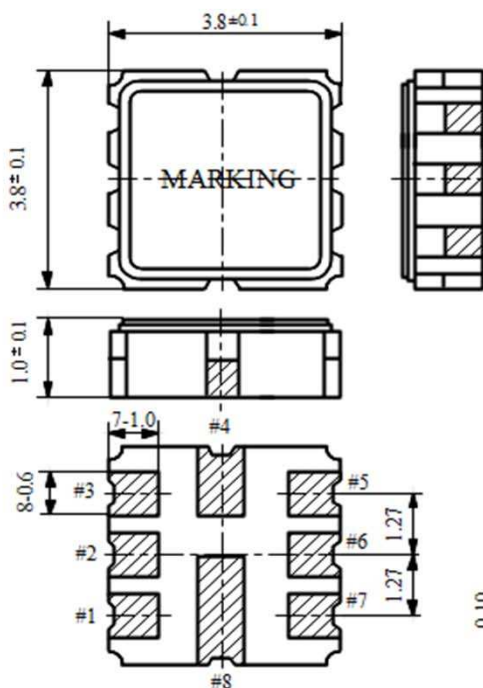
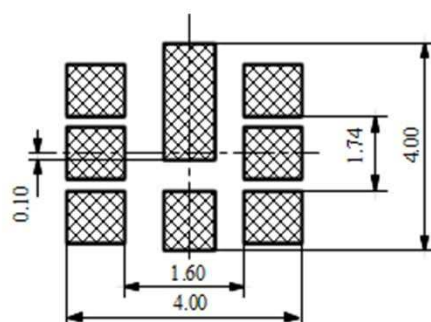


Fig 1. Test Circuit

### ■ Suggested pad (Top view)



### CONNECTION

#1 : INPUT
#2 : GND
#3 : GND
#4 : GND
#5 : OUTPUT
#6 : GND
#7 : OUT
#8 : GND