32.768KHz

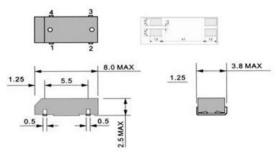
# **YIC**

### MC306 : Tuning Fork SMD Quartz Crystal

#### SPECIFICATION

Туре	MC306	Conditions	
Frequency Range	32.768KHz		
Load Capacitance	7pF or 12.5pF		
Drive Level	1µ W Max.		
Frequency Tolerance	±20ppm	at 25℃	
Series Resistance	50KΩ Max.		
Turnover Tempertature	25℃±5℃		
Temperature Coeffcient	-0.035±0.01ppm/C <sup>2</sup>		
Operating Temperature Range	-40°C ~ +85°C	at 25°C	
Storange Temperature Range	-55℃ ~ +125℃		
Motional Capacitance	0.0028pF Typical	Depend on frequency	
Shunt Capacitance	1.45pF Typ.	Depend on frequency	
Capacitance Ratio (C0/C1)	500 Typical	Depend on frequency	
Aging	±5ppm Max.	25°C±3°C	
Quality Factor	50000 Typical	Depend on frequency	
Insulation Resistance	500MΩ Min	DC 100V±5V (Pin to Pin, Pin to case)	

• DIMENSIONS (mm)



INTERNAL CONNECTIONS



Pin#2 and #3 should be soldered tobeOPEN electrically to the PCB.

#### Recommended Land Pattern



## SM38A, SM26B, SMBSP Series: Tuning Fork SMD Ttype

#### • SPECIFICATION

• SPECIFICATION			
Туре	SM38A	SM26B	SM26BSP
Frequency Range	30-100KHz	30-200KHz	30-200KHz
Load Capacitance	7pF or 12.5pF	7pF or 12.5pF	7pF or 12.5pF
Drive Level	1µ W Max.	1µ W Max.	1µ W Max.
Frequency Tolerance	±20ppm Typical	±20ppm Typical	±20ppm Typical
Series Resistance	30KΩ Max.	50KΩ Max.	50KΩ Max.
Turnover Tempertature	25°C±5°C	25°C±5°C	25°C±5°C
Temperature Coeffcient	-0.035±0.01ppm/C <sup>2</sup>	-0.035±0.01ppm/C <sup>2</sup>	-0.035±0.01ppm/C <sup>2</sup>
Operating Temperature Range	-10°C ~ +70°C	-10°C ~ +70°C	-10°C ~ +70°C
Storange Temperature Range	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Motional Capacitance	0.0035pF Typical	0.0028pF Typical	0.0028pF Typical
Shunt Capacitance	1.75pF Typ.	1.45pF Typ.	1.45pF Typ.
Capacitance Ratio (C0/C1)	500 Typical	500 Typical	500 Typical
Aging	±5ppm Max.	±5ppm Max.	±5ppm Max.
Quality Factor	60000 Typical	50000 Typical	50000 Typical
Insulation Resistance	500MΩ Min	500MΩ Min	500MΩ Min

Soldering the body of the cylinder type crystal units with PCB Must be avoided due to deteriorate the characteristics or damage the products.

Rubber adhesive is recommended.

#### DIMENSIONS (mm) SM38A 8.3±0 ¢ 3.0±0.1 (1) 1.7±0 SM26B 6.0±0.2 2.0±0.1 5 (1) 1.7±0.3 2.7±0.3 (1) $1.7 \pm 0.3$ $6.0 \pm 0.2$ SM26BSP P2.0±0.1 Ħ (1)1.7±0.3 2.7±0.3 2.0 SM-38A 2.0 SM-26B 2.5 6.0 10 2.5 3 1.75 SM-26BSP 10 2.5 0.30 1.75 (Recommened Land Pattern)

# 30.000 - 200.000KHz