

TUNING FORK SMD WATCH CRYSTAL

FEATURES

- Small size
- Consumer electronics
- Excellent shock and environmental characteristics

SPECIFICATIONS

ITEM	DESCRIPTION
Frequency range	30.000KHz~350.000KHz
Frequency Tolerance(at 25℃)	± 30ppm(STD)、± 20ppm ~ ± 50ppm or specify
Turnover Temperature	25℃ ± 5℃
Frequency Temperature Cure	-0.034 ± 0.006ppm/℃
Operating Temperature Range	-10℃~+60℃、-20℃~+70℃、-40℃~+85℃ or specify
Equivalent Series Resistance	see table No.1
Storage Temperature Range	-55℃ ~ +125℃
Shunt Capacitance (Co)	2.0pF Typ
Dynamic Capacitance(C1)	4.0fF Typ
Load Capacitance (CL)	12.5pF(standard)、6.0pF~12.5pF or specify
Drive Level	1.0uw
Insulation Resistance	500M ohms Min / DC 100V
Aging	± 3ppm/year

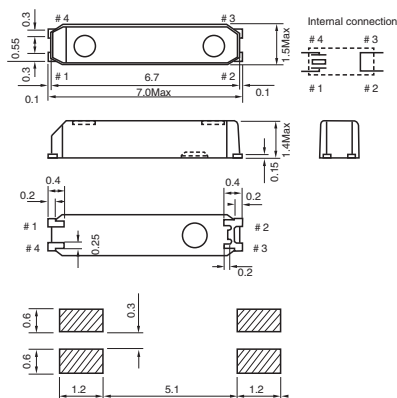


EQUIVALENT SERIES RESISTANCE(ESR) TABLE No.1

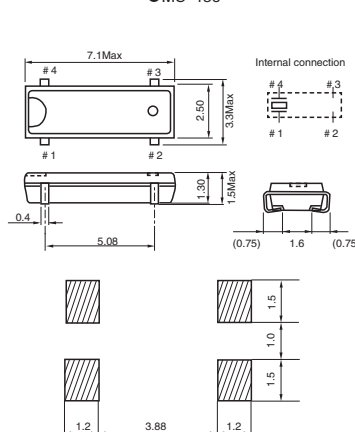
Frequency Range	Mode	ESR(Ω)	Frequency Range	Mode	ESR(Ω)
30.000KHz~40.000KHz	Fundamental	40K Max	70.000KHz~200.000KHz	Fundamental	22.5K Max
40.000KHz~60.000KHz	Fundamental	30K Max	200.000KHz~350.000KHz	Fundamental	20K Max
60.000KHz~70.000KHz	Fundamental	25K Max	32.768KHz(MC-146/156)	Fundamental	65K Max

OUTLINE DIMENSIONS (mm)

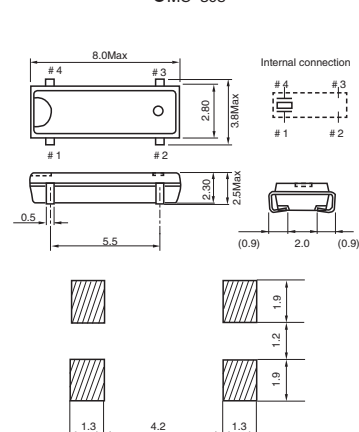
●MC-146



●MC-156



●MC-308



PART NUMBER

TIM-	XWA	F	32.768000	± 20	-20℃~+70℃	12.5	40
Type	oscillator mode	Frequency(KHz)	Frequency tolerance	operating temperature range	Load capacitance(pf)	ESR(Ω) Max	
XWA:MC-146					12.5:12.5pf		
XWB:MC-156					00:SERIES		
XWC:MC-308	F:Fundamental	32.768:32.768KHz	± 20: ± 20ppm			40:40KΩ Max	