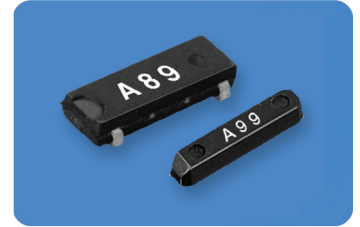


TUNING FORK SMD WATCH CRYSTAL



FEATURES

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

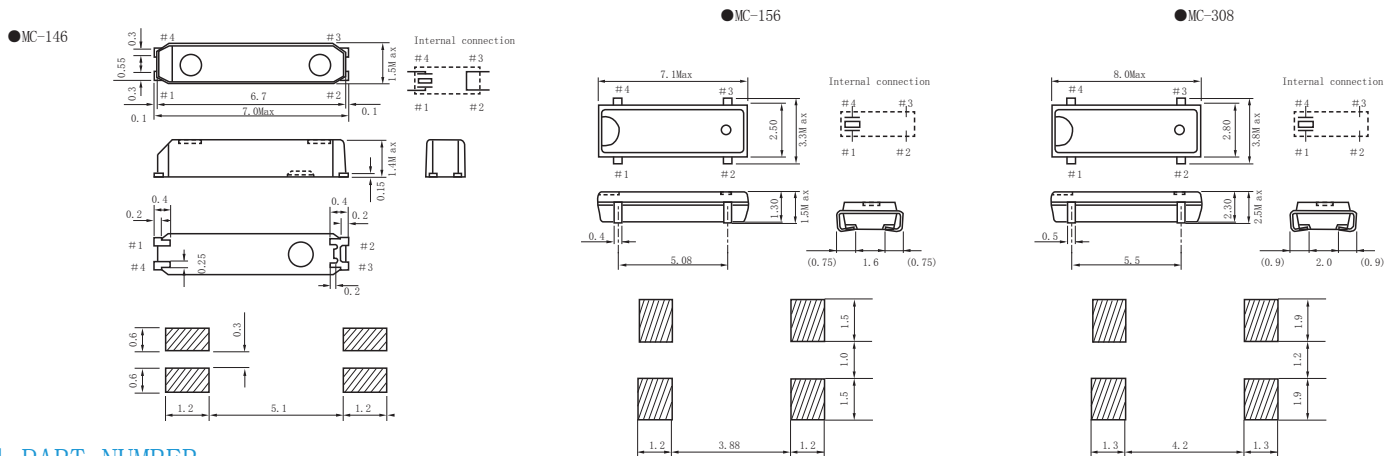
SPECIFICATIONS

ITEM	DESCRIPTION
Frequency range	30.000KHz~350.000KHz
Frequency Tolerance(at 25°C)	±30ppm(STD)、±20ppm ~ ±50ppm or specify
Turnover Temperature	25°C±5°C
Frequency Temperature Cure	-0.034±0.006ppm/°C
Operating Temperature Range	-10°C~+60°C、-20°C~+70°C、-40°C~+85°C or specify
Equivalent Series Resistance	see table No.1
Storage Temperature Range	-55°C ~ +125°C
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)



PART NUMBER

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