

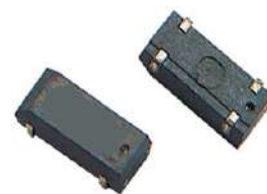
SHOULDER

Surface Mount Package For Tuning Fork 32.768KHz

Quartz Crystal

FEATURE

- Wide Frequency range
- Small size
- Tape & Reel
- Designed for Microprocessor Systems and Consumer Electronics



ELECTRICAL SPECIFICATIONS

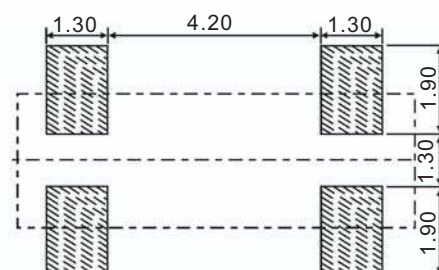
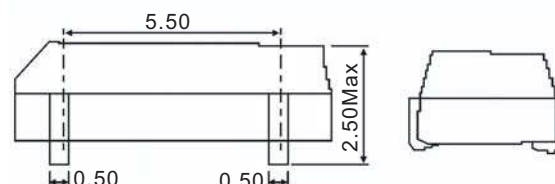
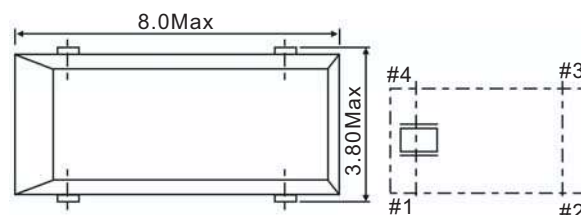
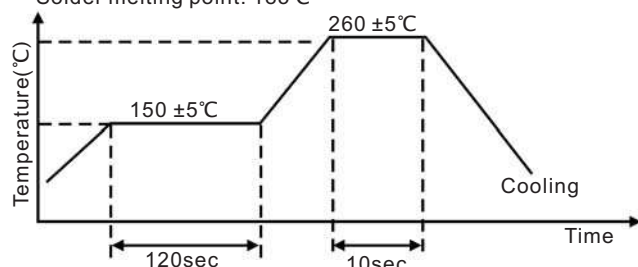
Frequency	25.000KHz ~307.200KHz
Frequency Tolerance(at 25°C)	±10ppm to ±100ppm
Temperature Coefficient	-0.035±0.01ppm/°C
Load Capacitance(C _L)	12.5pF Typical
Equivalent Series Resistance	See Below Table
Turnover Temperature	25±5°C
Operating Temperature Range	-10°C ~ +60°C to -40°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C
Shunt Capacitance(C ₀)	1.35pF Typical
Dynamic Capacitance(C ₁)	0.003pF Typical
Drive Level(Typical)	1 μW Max
Insulation Resistance	500MΩ Min at DC100V±15V
Aging @25°C 1 st year (Max)	±5ppm/year

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency(KHz)	E.S.R(Ω)	Frequency(KHz)	E.S.R(Ω)
25.000~39.999	65K Max	70.000~99.999	50K Max
40.000~59.999	60K Max	100.000~307.200	45K Max
60.000~69.999	55K Max		

DIMENSIONS AND REFLOW SOLDERING PROFILE

Total time: 200 sec Max
Solder melting point: 185°C



Frequency Stability Over Operating Temperature Range

Temperature Range	Frequency Stability (ppm)		
	±50ppm	±100ppm	±150ppm
-10~+60°C	✓	✓	✓
-20~+70°C	✓	✓	✓
-40~+85°C			✓

PART NUMBER

ZM206-	32.768	-	12.5	-	30	-	50	-	A
(Package SMD8*3.8mm)	Frequency 32.768KHZ		Load Capacitance 12.5 pF		Frequency Tolerance ±30ppm		Frequency Stability ±50ppm		Operating Temperature Range A:-20~70°C B:-10~60°C E:-40~85°C