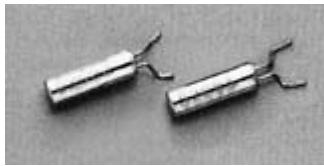


CMR200T

(2,000pcs/reel)



■ FEATURES:

- Because of their excellent shock resistance and low power consumption, the units are ideal for portable equipment.
- Features superior characteristics indigenous to tuning fork-type quartz crystal units.
- Ideal for low cost SMD applications.
- Provided in Tape and Reel.

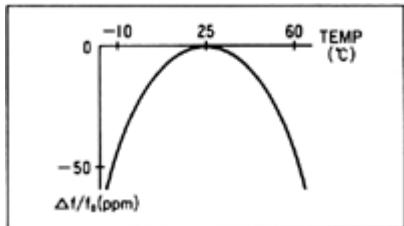
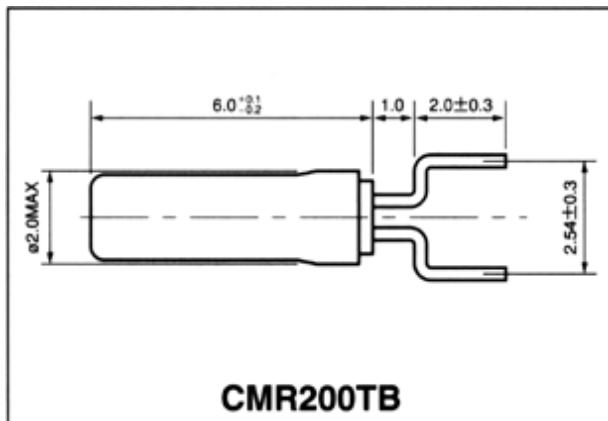
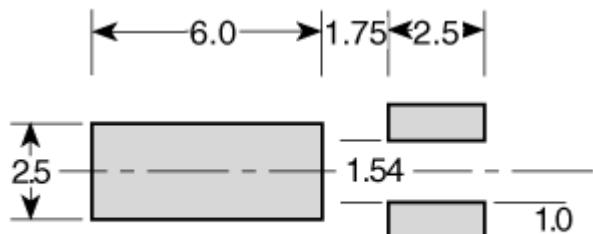
■ APPLICATIONS:

- Permits use as a clock source for communication equipment, AV equipment, OA equipment, measuring instruments and various types of clocks.

■ STANDARD SPECIFICATIONS

Item	CM200T		Conditions
Nominal frequency	f ₀	32.768kHz	
Frequency tolerance	delta f/f ₀	± 20ppm	At 25°C
Frequency vs.Temperature Characteristics	delta f/f ₀	See drawing	-10°C to +60°C
Turnover temperature	T _m	25°C ± 5°C	
Temperature coefficient	beta	-0.034 ± 0.006ppm/°C ₂	
Operating temperature range	T _{opr}	-40°C to + 85°C	
Storage temperature range	T _{stg}	-55°C to +125°C	
Equivalent series resistance	R ₁	35k ohm MAX.	At 25°C
Load capacitance	C _L	12.5pF TYP.	Please specify
Motional capacitance	C ₁	0.0030pF TYP.	
Shunt capacitance	C ₀	1.35pF TYP.	
Capacitance ratio	gamma	450 TYP.	
Drive level	DL	1 μ W MAX.	
Insulation resistance	IR	500M ohm MIN.	DC100V ± 15V
Aging (First year)	delta f/f ₀	± 3ppm MAX.	25°C ± 3°C
Sealing		1 x 10 ⁻² μ Pa·m ³ /s MAX.	
Shock resistance	±5ppm MAX. Drop test of 3 times on a hard board from 75cm height or shock test of 3000G x 0.3ms x 1/2sin wave x 3 directions		

■ FREQUENCY vs TEMPERATURE CURVE

**■ DIMENSIONS: (UNIT=mm)****CMR200TB****■ RECOMENDED SOLDERING PATTERN: (UNIT=mm)****CMR200TB**

B a c k