

■ Features

- ★ Appropriate for high density circuit board
- ★ Highly stable characteristics
- ★ Suitable for small mobile telecommunication devices

■ Application

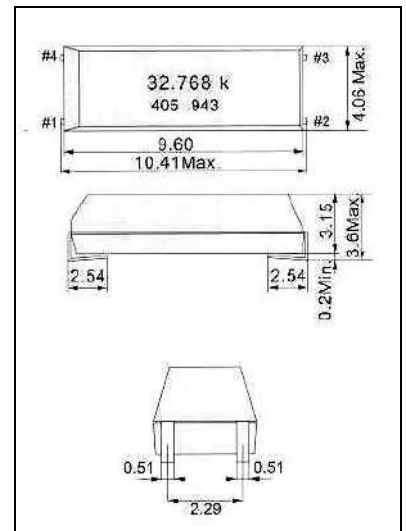
- ★ Watch and Clock
- ★ Remote Control
- ★ Telecommunication equipment
- ★ Consumer Electronics
- ★ Instrumentation
- ★ Audio/Video



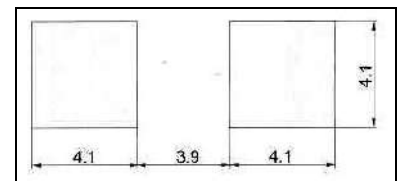
■ Specification (Characteristics)

Item	Specification
Frequency Range	32.768 KHz
Load Capacitance	6 ~ 12.5 pF
Drive Level	1.0 μ W Max.
Frequency Tolerance	± 20 ppm ~ ± 100 ppm
Series Resistance	50 K Ω Max
Turnover Temperature	-25 \pm 5 $^{\circ}$ C
Temperature Coefficient	-0.04 ppm/ $^{\circ}$ C ² Max.
Operating Temperature Range	-40 ~ +85 $^{\circ}$ C
Storage Temperature Range	-55 ~ +125 $^{\circ}$ C
Motional Capacitance	0.002 pF Typical
Shunt Capacitance	0.85 pF Typical
Aging at first year	± 3 ppm Max.

■ Dimension (Unit: mm)



■ Recommended Soldering



■ Part Number and Ordering

Part Number Code	Holder Type + Frequency + Tolerance + CL
Ordering Code	Same as Above
Example	ZM405-32.768K-20-12.5P

■ Internal Connections

