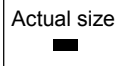


◆ FEATURES

- 32.768 kHz tuning fork crystal unit
- Compact package (3.2 × 1.5 × 0.8 mm Max. / 10.6 mg)
- High-precision frequency (available from ±10 ppm @25°C)
- Wide operating temperature range (-40 ~ +105°C)
- High-reliable ceramic/metal package sealed by seam welding
- One of our best-selling models
- Manufactured in our Xian factory, China
- Specifications in conformity with AEC-Q200 available on request

◆ APPLICATIONS

- Smartphones / wireless-modules / in-vehicle devices
- Applications that require accurate clock sources



◆ ORDERING INFORMATION & SPECIFICATIONS

Ordering Number (Sample): **F2S** — **32768** — **090** — **D 70** — **R** — **H X ##**
 (1) (2) (3) (4) (5) (6) (7) (8) (9)

(1) Type
F2S

(2) Nominal Frequency
32.768 kHz
32768

(3) Load Capacitance
7.0, 9.0, 12.5 pF*1
e.g. 9.0 pF = 090

*1 Other values available on request

(4) Frequency Tolerance @ 25°C	
±10 ppm	B
±20 ppm	D
±30 ppm	E
±50 ppm	F
Other	N

(5) Equivalent Series Resistance (Motional/Shunt Capacitance)	
70 kΩ Max. (6.5 fF Typ./1.5 pF Typ.)	70
Other	NN

(6) Operating Temperature	
-20 ~ +70°C	P
-40 ~ +85°C	R
-40 ~ +105°C	S
Other	N

(7) Storage Temperature*2	
-40 ~ +85°C	G
-40 ~ +105°C	H
-55 ~ +125°C	J
Other	N

*2 Not applicable to packing materials

(8) Tape & Reel (φ180 mm)	
3000 pcs/reel	X
Other	N

(9) RIVER Use Only (As needed)

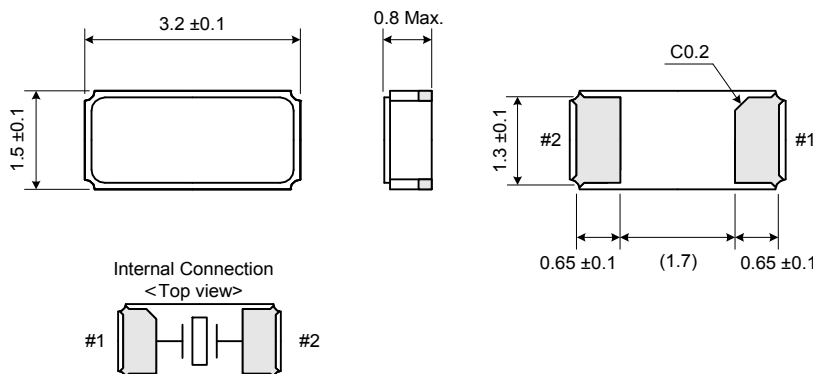
Temperature Coefficient
-0.03 ±0.01ppm/°C ²

Turnover Temperature
25 ±5°C

Drive Level
0.5 μW Max.

- "Ordering Number" codes are indicated in blue, and the corresponding specifications are described in black.
- Not all combinations of options are available as a standard specification.
- For specifications other than those above, please consult our sales or contact us via our website with your requirement.

◆ OUTLINE DEMENSIONS



◆ LAND PATTERN

Unit: mm

