



Features

- ▣ Unique square profile case for pick & place
- ▣ Low cost
- ▣ Large stocks held at all times
- ▣ Miniature size for high density applications
- ▣ High shock & vibration resistance
- ▣ Wide temperature range

Specifications

| Parameters | Product | Option Codes |
|---|---|--------------|
| | MS1V-TK | |
| Frequency range: 32.768kHz 32.0 ~ 200kHz | <input checked="" type="checkbox"/> <input type="checkbox"/> | specify |
| Calibration tolerance: ±20ppm ±30ppm ±100ppm | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | specify |
| Operating temperature range: -40 to +85°C -55 to +85°C | <input checked="" type="checkbox"/> <input type="checkbox"/> | I M |
| Circuit condition: 12.5pF other values | <input checked="" type="checkbox"/> <input type="checkbox"/> | specify |
| Static capacitance (C₀): 1.0pF typ | <input checked="" type="checkbox"/> | |
| Motional capacitance (C₁): 2.25fF typ | <input checked="" type="checkbox"/> | |
| Equivalent series resistance: 60kΩ typ, 80kΩ max | <input checked="" type="checkbox"/> | |
| Ageing: ±3ppm max first year | <input checked="" type="checkbox"/> | |
| Drive level: 1.0μW max | <input checked="" type="checkbox"/> | |
| Turnover temperature (T₀): +25°C ±5°C | <input checked="" type="checkbox"/> | |
| Frequency / temp coefficient: -0.038ppm/°C ² typ | <input checked="" type="checkbox"/> | |
| Shock resistance: ±5ppm max 5,000g, 0.3ms, ½ sine | <input checked="" type="checkbox"/> | |
| Vibration resistance: ±5ppm max 20g, 10.0 ~ 2,000Hz | <input checked="" type="checkbox"/> | |

▣ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Product name + option codes + frequency + calibration tolerance

eg: **MS1V-TK/I 32.768kHz ±20ppm -40+85°C** (standard)

MS1V-TK/M 32.768kHz ±100ppm -55+85°C

Option code X (eg MS1V-TK/X) denotes a custom spec.

- ◆ Our standard SM watch crystal.
- ◆ Available on T&R - 5k pcs per reel.
- ◆ Refer to our website for T&R and soldering details.
- ◆ Specifications vary by frequency. Specifications shown are for 32.768kHz.
- ◆ Pad compatible with many standard watch crystals (eg MC-306, MC-406, SP-T1A, SP-T2A, CM-200S, CM-202S).