

# 1S1V-T1K

Tuning Fork Crystal 32 kHz - 100 kHz



# **DIMENSIONS** Recommended Solder Pad: Package: 6,1 2,5 All dimensions in mm typical

#### **APPLICATIONS**

IoT Metering Wearables Health Care Consumer Electronics

#### **DESCRIPTION**

The MS1V-T1K is a low frequency surface mount technology Quartz Crystal Unit that incorporates a tuning fork Quartz Crystal Resonator. It operates under vacuum in a hermetically sealed square-bodied metal can package.

## **FEATURES**

High stability is guaranteed by hermetic sealing.

High shock and vibration resistant.

Proven surface mount technology package for reflow soldering.

Excellent lead coplanarity for surface mounting.

RoHS-compliant.

### **ELECTRICAL CHARACTERISTICS** AT 25°C

Standard Frequency	1)	FL	32.768	kHz
Load capacitance	2)	C <sub>L</sub>	6.0 / 7.0 / 9.0 / 12.5	pF
Frequency tolerance	3)	ΔF/F	±20	ppm
	ĺ	ΔF/F	±100	ppm
Series resistance typ./max.		R <sub>S</sub>	45 / 60	kΩ
Motional capacitance typ.		C <sub>1</sub>	2.25	fF
Static capacitance typ.		C <sub>0</sub>	0.9	pF
Drive level max.		Р	1.0	μW
Insulation resistance min.		R <sub>i</sub>	500	МΩ
Aging first year max.		ΔF/F	±3	ppm
Turnover temperature		T <sub>0</sub>	25 ±5	°C
Frequency vs. temperature		ΔF/F <sub>0</sub>	$-0.035 \text{ ppm/}_{^{\circ}\text{C}^{2}} (\text{T - T}_{0})^{2} \pm 10\%$	ppm

- 1) Other frequencies on request.
- 2) Other load capacitances on request.
- 3) Tighter and wider frequency tolerances on request.





