

4.9 x 1.8 x 1.0mm Miniature SMD
32.768kHz

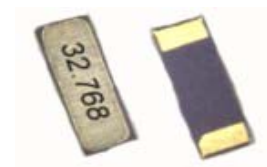
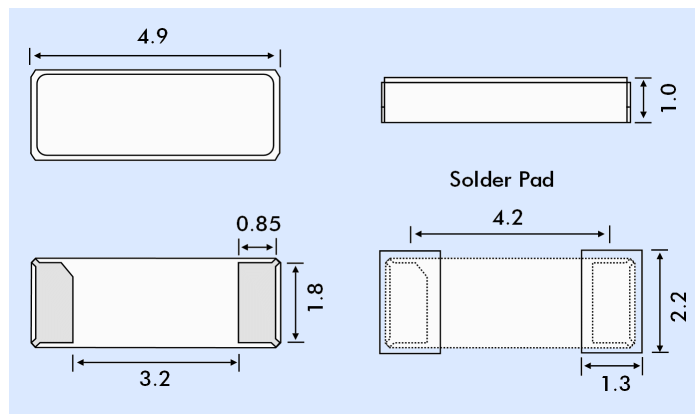
- Ultra-miniature ceramic package 4.9 x 1.8 x 1.0mm
- RoHS compliant and lead free
- Low ageing, high shock and vibration resistance
- Uses include battery operated equipment

DESCRIPTION

X4918 crystals provide 32.768kHz in an ultra-miniature package. The part is designed to provide a small component size for real-time clock applications. The micro-miniature size and rugged construction make them ideal for real time clocks and battery powered, hand-held equipment.

SPECIFICATION

Nominal Frequency:	32.7680kHz
Calibration Tolerance at 25°C:	±20ppm ±30ppm (standard) ±50ppm
Crystal Cut:	XY-cut
Load Capacitance (CL):	12.5pF, 9.0pF or 7.0pF
Equivalent Series Resistance (ESR):	65kΩ typical, 70kΩ max.
Drive level:	1.0μW max.
Temperature Coefficient:	-0.034ppm/°C ² (Parabolic)
Turnover Temperature:	+25°±5°C
Quality Factor:	40,000 min.
Shunt Capacitance:	1.3pF typical
Motional Capacitance:	21fF typical
Capacitance Ratio:	619 typical
Ageing:	±3ppm/year max.
Insulation Resistance:	500MΩ minimum @100VDC
Operating Temperature Range:	-40° to +85°C
Storage Temperature Range:	-55° to +125°C
Reflow Soldering:	10s max. at 250°C ±10°C
Shock Resistance:	±5ppm max, free drops x3 from 75cm height onto hard wood surface.
Packaging:	12.0mm EIA tape, 4.0mm pitch, 180mm diameter reel, 3k pieces/reel


OUTLINE & DIMENSIONS

PART NUMBER AND SPECIFICATION

Order part number: 32.768kHz X4918/30/--/-40+85/12.5pF

This provides a 32.768kHz crystal in X3215 package with ±20ppm calibration tolerance at 25°C, temperature stability according to the above parabolic coefficient at a load capacitance of 12.5pF.

Options:

Calibration Tolerance: ±20ppm
±30ppm (standard)
±50ppm

Load Capacitance: 7.0pF
9.0pF
12.5pF (standard)

**STABILITY OVER TEMPERATURE
X-Cut Crystal**
