

TCXO - 32.768kHz

Low-power (300nA) temperature compensated quartz crystal oscillator with programmable output frequency

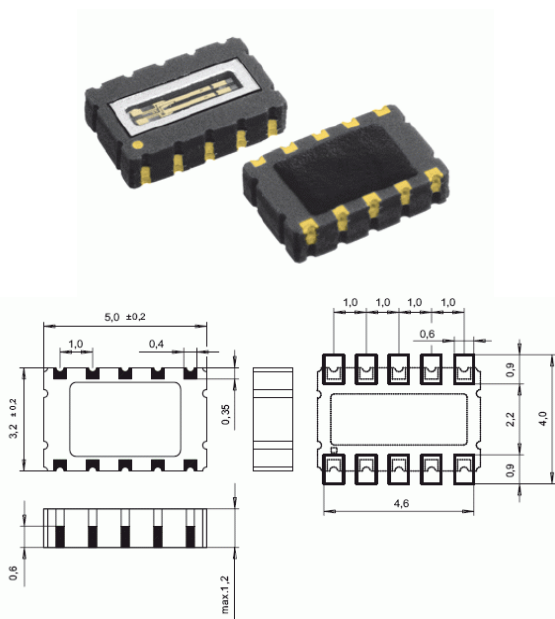
1 General Description

The MS1002 is a temperature compensated 32.768kHz oscillator using a classical tuning fork quartz crystal. The MS1002 uses a load modulation method to compensate the temperature drift of the quartz crystal.

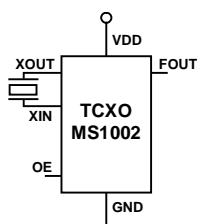
2 Applications

- § Mobile applications
- § Outdoor applications
- § General Metering
- § Environmental recording
- § Data loggers

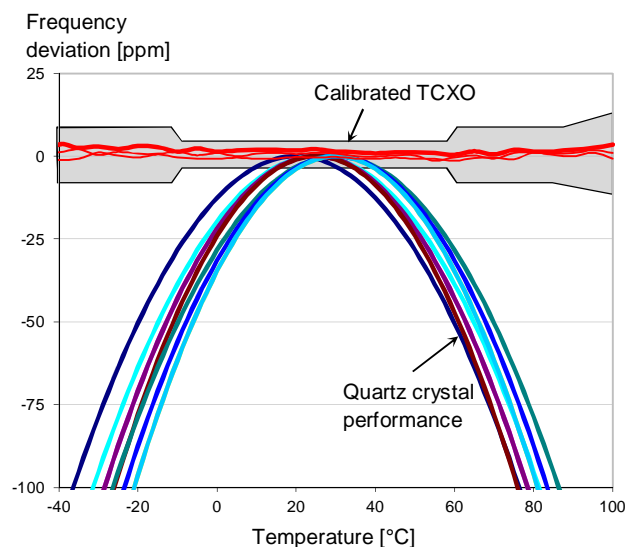
3 Package



4 Typical application



5 Timing accuracy



6 Features

- § Accuracy from -40°C to 85°C: ± 5 ppm
- § Current consumption: 300nA typ. at 1.5V
- § Operating voltage: 1.45V to 5.5V
- § Programmable output frequency: 32'768, 4'096, 1'024, 128, 32, 1, 1/10 or 1/60Hz
- § Programmable temperature measuring period: 0.5, 1, 2 or 4 minutes
- § Programmable output driver mode: CMOS or open-drain
- § Output Enable input pad (OE)
- § Die size 1.2mm x 1.8mm

7 Ordering Information

Typ	Package	Shipping	Article No.
MS1002	Chip	Chip in Tray	9160002
MS1002	Chip	Wafer	9160003
MS1002	Chip	Wafer sawn	9160111