

## MEMS SUPER-TCXO SIT156X & SIT157X FOR WEARABLES, IoT, MOBILE



### FEATURES/BENEFITS

- » Smallest timing solution: 1.5 mm×0.8 mm×0.6 mm CSP
- » Extreme accuracy: ± 5 ppm (-40°C ... + 85°C)
- » In-system auto-calibration function
- » Multiple loads (ICs) controlled
- » Competitive priced
- » Usage saves space and cost
- » Samples available, mass production in Q2/2016

### APPLICATIONS

- » Low Power RF applications as Bluetooth, Bluetooth Low Energy (BLE), WiFi
- » Sport- and leisure equipment (health/wellness monitors)
- » Industrial instrumentation and diagnostic equipment
- » Devices with critical power consumption

SiTime, sales by Endrich, announces a new family of Super TCXO (SiT156x / 7x). The smallest (1.5 mm×0.8 mm) and accurate (±5 ppm) timing solutions, that are primarily used in wearables, IoT and mobile products and allow through your precision there longer battery life. This ultra small silicon MEMS Super TCXO are particularly suitable for use in SIP (Session Initiation Protocol) modules and include an innovative in-system auto-calibration function. This allows the subsequent calibration of inaccuracies after the system installation, for example, after soldering or molding of the application. In addition to 32 kHz Super-TCXO (SiT156x) developed SiTime oscillators with optional factory-programmable frequencies from 1 Hz to 1 MHz (SiT157x) for low-power RF and wireless charging applications.

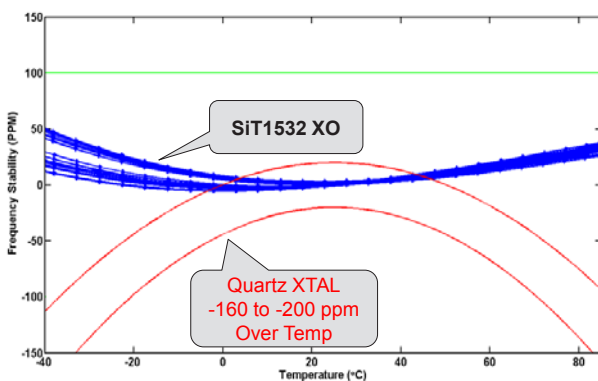
How does SiTime achieve such accuracy, small size, and low power?

SiTime's TempFlat MEMS™ technology enables extremely small silicon MEMS resonators, which are 0.4 mm x 0.4 mm in size. These resonators are mated with sophisticated, low-power, mixed-signal PLL technology, with an accurate temperature sensor and compensation circuitry. The complete system of MEMS and programmable analog forms the Super-TCXO that is finely tuned to provide the best accuracy, smallest size, and lowest power.

### MOST ACCURATE SUPER TCXO

#### SiT1532 XO (March 2013) 100 ppm over Industrial Temp

2x More accurate than quartz XTAL



#### SiT156x/7x Super-TCXO ±5 ppm over Industrial Temp

30x – 40x more accurate than quartz XTAL

