SiTime™ MEMS Timing Solutions

LIFETIME WARRANTY

RoHS compliant 2002/95/EC

Voltage Controlled Temperature Compensated Oscillators (VC-TCXO)

Static sensitive device

SiTime's programmable, voltage controlled, temperature compensated oscillators (VCTCXO) are the most flexible and reliable solutions for telecom, networking, wireless and embedded applications. They are pin compatible with crystal oscillators and crystal-based TCXO oscillators, enabling 100% drop-in replacement for crystal-based products with no design or layout changes.

SiTime's Temperature Compensated Oscillators (TCXO)

- Wide frequency range from 1 MHz to 625 MHz
- High frequency stability as precise as ±2.5 PPM
- Option to voltage control with a wide pull range
- Broad temperature support from -40C to +85°C
- Complete single ended and differential output support
- Industry standard packages as small as 2.5 x 2.0 mm

Model	Output Type & Description	Frequency & Characteristics	Op Temp. Range & Stability Option (PPM)	Pulling Range (PPM)	Control Voltage	Package Size (mm)
SiT5000	LVCMOS/LVTTL/HCMOS High Performance Programmable Freqs Smallest Size	26 Standard Freqs 1.8V & 2.5-3.3V RMS Phase Jitter <1ps Softedge™ 1-6ns	-20°C to +70°C -40°C to +85°C ±1.5, ±2.0, ±2.5, ±5 PPM	±12.5 or Off	0-Vdd	2.5x2.0x0.75 3.2x2.5x0.75 5.0x3.2x0.75 7.0x5.0x0.9
SiT5001	LVCMOS/LVTTL/HCMOS High Performance Programmable Freqs	1-80MHz 1.8V & 2.5-3.3V RMS Phase Jitter <1ps Softedge™ 1-6ns	-20°C to +70°C -40°C to +85°C ±1, ±1.5, ±2.5, ±5 PPM	±12.5 ±25 ±50 or off	0-Vdd	2.5x2.0x0.75 3.2x2.5x0.75 5.0x3.2x0.75 7.0x5.0x0.9
SiT5021	LVPECL & LVDS High Frequency High Performance Programmable Freqs	1-220MHz 2.5, 3.3 & 2.25-3.63 RMS Phase Jitter <0.6ps	-20°C to +70°C -40°C to +85°C ±2.5, ±5 PPM	±12.5 ±25 ±50 or off	0-Vdd	3.2x2.5x0.75, 5.0 x 3.2 x 0.75 7.0 x 5.0 x 0.9
SiT5021	LVPECL & LVDS High Frequency High Performance Programmable Freqs	220-625MHz 2.5, 3.3 & 2.25-3.63 RMS Phase Jitter <0.6ps	-20°C to +70°C -40°C to +85°C ±2.5, ±5 PPM	±12.5 ±25 ±50 or off	0-Vdd	3.2x2.5x0.75, 5.0 x 3.2 x 0.75 7.0 x 5.0 x 0.9