



SiTime™

MEMS Timing Solutions



Programmable Clock Generator

Static sensitive device

SiTime's programmable clock generators are the first in the industry to integrate MEMS resonators, thus eliminating the need for external crystals and other clock sources.

Key features of SiTime's programmable clock generators include:

- Small SOT23-5 package best for board level solder joint reliability
- Wide frequency range from 1-137MHz
- Best stability of ±20 PPM from -55 °C to 125 °C

Model	Description	Frequency & Characteristics	Operating Temperature Range	Frequency Stability (PPM)	Package Size (mm)
SiT2001B	LVC MOS/HCMOS O/P Programmable Rise/Fall Time 0.24 to 0.40ns	Frequencies 1-110MHz 1.8V, 2.5V, 2.8V & 3.3V	-20°C to +70°C -40°C to +85°C	±20 ±25 ±50	SOT-23 2.9 x 2.8 x 1.2
SiT2002B	LVC MOS/HCMOS O/P High Frequency Programmable Rise/Fall Time 0.25 to 1.50ns	Frequencies 115-137MHz 1.8V & 2.5 -3.3V continuous	-20°C to +70°C -40°C to +85°C	±10, ±25, ±50	SOT-23 2.9 x 2.8 x 1.2
SiT2018B	LVC MOS/HCMOS O/P High Temperature Programmable Rise/Fall Time 0.24 to 0.40ns	Frequencies 1-110MHz 1.8V & 2.5 -3.3V continuous 0.1ppb/G (G-Sensitivity)	-40°C to +105°C -40°C to +125°C	±20 ±25 ±30 ±50	SOT-23 2.9 x 2.8 x 1.2
SiT2019B	LVC MOS/HCMOS O/P High Temperature/High Frequency Programmable Rise/Fall Time 0.25 to 1.50ns	Frequencies 115-137MHz 1.8V & 2.5 -3.3V continuous 0.1ppb/G (G-Sensitivity)	-40°C to +105°C -40°C to +125°C	±20 ±25 ±30 ±50	SOT-23 2.9 x 2.8 x 1.2
SiT2020B	Ruggedised LVC MOS/HCMOS O/P For Harsh Environments Mil. Temp Range Programmable Rise/Fall Time 0.24 to 0.40ns	Frequencies 1-110MHz 1.8V & 2.5 -3.3V continuous 0.1ppb/G (G-Sensitivity) 50g Shock & 70g vibration 500 Million Hrs MTBF	-55°C to +125°C	±20 ±25 ±30 ±50	SOT-23 2.9 x 2.8 x 1.2
SiT2021B	Ruggedised LVC MOS/HCMOS O/P For Harsh Environments Mil. Temp Range/High Frequency Programmable Rise/Fall Time 0.25 to 1.50ns	Frequencies 115-137MHz 1.8V & 2.5 -3.3V continuous 0.1ppb/G (G-Sensitivity) 50g Shock & 70g vibration 500 Million Hrs MTBF	-55°C to +125°C	±20 ±25 ±30 ±50	SOT-23 2.9 x 2.8 x 1.2