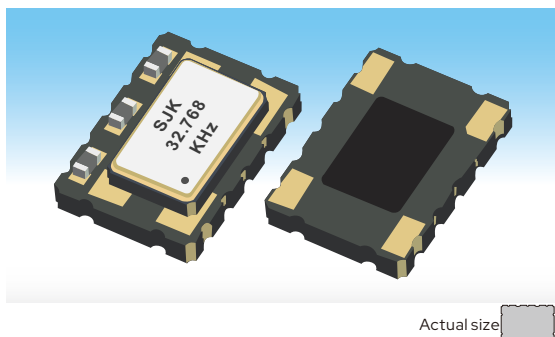


TCXO / Temperature Compensated Crystal Oscillator

8T Series SMD 7050 TCXO 32.768kHz~60MHz O: Clipped Sine Wave/CMOS Size: 7.0×5.0×2.0mm



Features

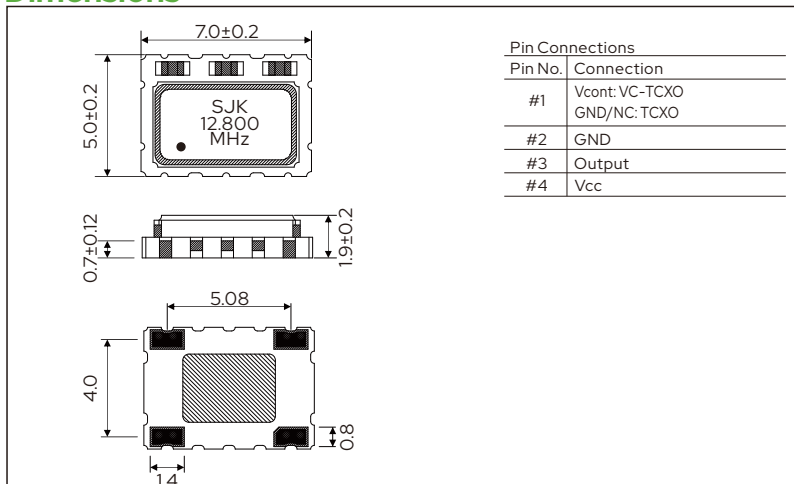
- 7050 size miniature and lightweight SMD TCXO
- Low voltage operation
- Single package structure
- High frequency range: 32.768kHz~52MHz
- Low phase noise
- VC-TCXO available
- Application for GPS /GNSS, Mobile phone, Wearable device, IoT, Telecommunications, Industrial radio communications, etc
- RoHS Compliant /Pb Free



Standard Specifications

Item		Type	8T Series SMD 7050 TCXO /VC-TCXO		
Output Frequency Range			6.4MHz~52MHz	32.768kHz	6.4MHz~52MHz
Supply Voltage			1.8V /2.5V /3.0V /3.3V	3.3V	1.8V /2.5V /3.0V /3.3V
Current Consumption			3.5mA max.	8mA max.	13mA max.
Output Level			Clipped Sine Wave 0.8Vp-p min. (DC-Coupled)	CMOS V _{OH} : 0.9V _{cc} min., V _{OL} : 0.1V _{cc} max. Duty Cycle: 45~55%	
Output Load			10KΩ//10pF	15pF	
Frequency Stability	vs. Tolerance		±1.0ppm max.	±2.0ppm max.	
	vs. Temperature		±0.5ppm~±3.0ppm max.	±0.5ppm~±3.0ppm max.	
	vs. Supply Voltage		±0.2ppm max.	±0.3ppm max.	
	vs. Load		±0.2ppm max.	±0.3ppm max.	
	vs. Aging		±1.0ppm/year max.	±1.0ppm/year max.	
Start-up Time			2ms max.	10ms max.	
Rise and Fall Time			/	10ns max.	
VC-TCXO	Frequency Control Range		±5.0ppm min.		
	Control Voltage Range		0.9V±0.6V@V _{cc} (1.8V), 1.4V±1V@V _{cc} (2.5V), 1.5V±1V@V _{cc} (3.0V/3.3V)		
	Input impedance		1.0MΩ min.		
	Response Slope		Positive		
Phase Noise	Offset 10Hz		-80dBc/Hz @13MHz	-	-96dBc/Hz @10MHz
	Offset 100Hz		-115dBc/Hz @13MHz	-	-122dBc/Hz @10MHz
	Offset 1KHz		-135dBc/Hz @13MHz	-	-138dBc/Hz @10MHz
	Offset 10KHz		-148dBc/Hz @13MHz	-	-145dBc/Hz @10MHz
Operating Temperature Range			-30~+85°C, -40~+85°C, or specify		
Storage Temperature Range			-55~+125°C		

Dimensions



Recommended Land Pattern [mm]

