



Features and Benefits

Frequency range: 400MHz
Supply voltage: 5.0V
Steady current: 100mA Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ± 1.0 ppm
Aging: ± 0.5 ppm per year
Phase noise@100KHz: -145dBc/Hz
Operating temperature: -40°C to +85°C
Size: 25.4x22x12.8mm

Typical Applications

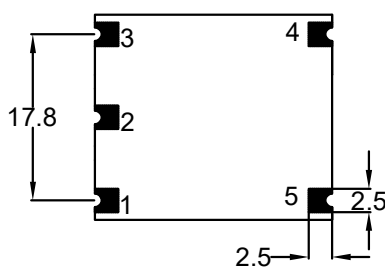
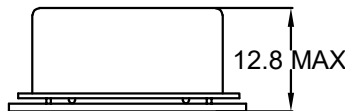
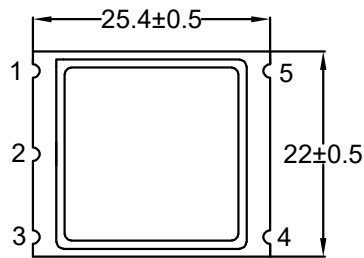
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

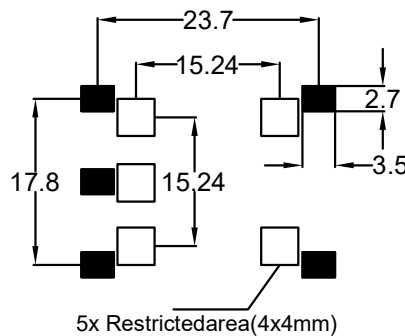
TCXO2522BE-400MHz-A-V offers wide temperature operation with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD240052-1



Solder PAD Layout



#1	Control Voltage
#2	GND
#3	Supply Voltage
#4	Output
#5	GND

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency	F _{nom}			400		MHz	
RF Output							
Signal Waveform			Sinewave				
Level			1.0		2.0	Vp-p	
Sub-harmonics					-40	dBc	
Load			50			ohm	
Power Supply							
Supply Voltage	V _{cc}	±5%		5.0		V	
Input Current					100	mA	
Frequency Adjustment Range							
Control Voltage			0.5	2.5	4.5	V	
Frequency Pulling Range			±5.0			ppm	
Linearity					±10	%	
Frequency Stability							
Total stability		including temp. stability, supply&load change, and 20years aging			±5.0	ppm	
Versus Operating Temperature Range		-40°C to +85°C			±1.0	ppm	
Tolerance		at +25°C			±1.0	ppm	
Versus supply voltage		±5% change			±0.1	ppm	
Versus Load		±10% change			±0.1	ppm	
Aging 1 st Year					±0.5	ppm	
Aging 20 Years					±2.5	ppm	
Phase noise		1KHz			-120	dBc/Hz	
		10KHz			-135	dBc/Hz	
		100KHz			-145	dBc/Hz	
		1MHz			-145	dBc/Hz	
		10MHz			-145	dBc/Hz	
Environmental, Mechanical Conditions							
Operating temperature range			-40°C to +85°C				
Storage temperature range			-45°C to +90°C				