

Features and Benefits

Supply Voltage: 3.3V

Output Waveform: LVCMOS

Frequency vs. Temperature $\leq \pm 0.5$ ppm from -40°C to +85°C

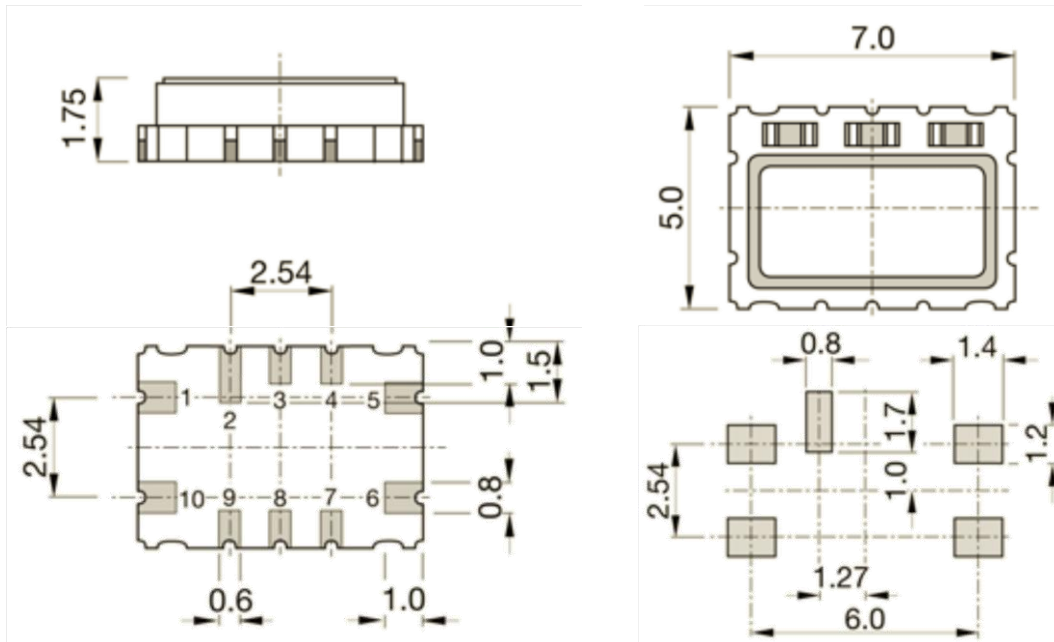
Typical Applications

Mobile Radio

Description

The TCXO7500QC-50MHz-A-V

Physical Dimensions and Pin Connections



Pin Function	
1	EFC voltage Vc
5	GND
6	Output
9	Tri-state
10	Vdc

Specification

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		F _{nom}			50.0000		MHz	
LVCMOS	Logic Level 1					0.9*Vcc	V	
	Logic Level 0			0.1*Vcc			V	
	Rise / Fall Time				3	10	ns	
	Duty Cycle			45	50	55	%	
Power Supply								
Voltage		V _{cc}	±5%		3.3		V	
Current Consumption						6.5	mA	
		T _{up}						
Frequency Control*								
Control voltage range		V _c		0.5	1.5	2.5	V	Tuning Slope Positive
Tuning range			@+25 °C	±5.0			ppm	
Frequency Stability								
Versus temperature			-40°C to 85°C	-0.5		+0.5	ppm	
Versus 5% change in supply voltage			±5%	-0.2		+0.2	ppm	
Versus 5% change in load			±10%	-0.1		+0.1	ppm	
First Year Aging				-1.0		+1.0	ppm	
Phase noise (typ.) @50 MHz Carrier Frequency			1 Hz				dBc/Hz	
			10 Hz					
			100 Hz			-110		
			1000 Hz			-130		
			10 KHz			-150		
			100 KHz					
Short-Term Stability	Tau = 1 second 100 samples					0.1	ppb	
Environmental Conditions								
Operating temperature range		-40°C to 85°C						
Storage temperature range		-55°C to 105°C						