



Features and Benefits

Frequency range: 100MHz
Supply voltage: 3.3V
Steady current: 25mA/Max
Output waveform: HCMOS
Frequency stability vs. operating temperature: ± 0.28 ppm
Aging: ± 3.0 ppm/20 years
Operating temperature: -40°C to $+85^{\circ}\text{C}$
Size: 20x13x7.5mm

Typical Applications

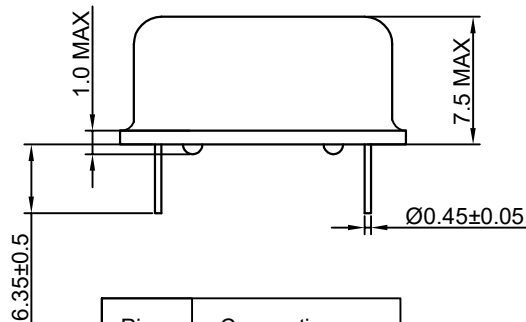
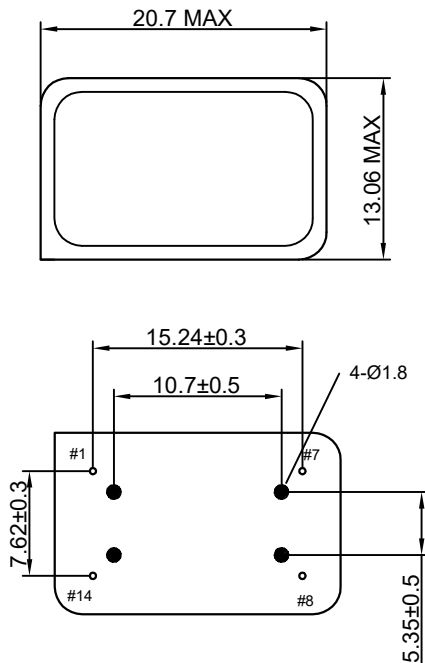
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

TCXO2013BE-100MHz-B offers wide temperature operation from -40°C to $+85^{\circ}\text{C}$ with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD160067-2



Pin	Connection
1	N.C
7	GND
8	Output
14	Vcc



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			100		MHz	
HCMOS	High Level		0.9V _{cc}			V	
	Low Level				0.1V _{cc}	V	
	Duty Cycle		45		55	%	
	Tr/Tf				8.0	ns	
	Output Load				15	pF	
Power Supply							
Voltage	V _{cc}	±5%		3.3		V	
Current Consumption					25	mA	
Frequency Stability							
Versus temperature		-40°C to +85°C			±0.28	ppm	
Initial Tolerance at 25°C					±0.5	ppm	
Versus change in supply voltage		±5%			±0.05	ppm	
Versus change in load		±10%			±0.05	ppm	
20 Years Aging					±3.0	ppm	
Phase Jitter (12KHz to 20MHz)		RMS			1.0	ps	
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-55°C to +125°C					