



Features and Benefits

Frequency range: 10MHz

Supply voltage: 5.0V

Steady Power: 1.5W Max

Output waveform: CMOS

Frequency stability vs. operating temperature: ± 10 ppb

Aging: ± 50 ppb per year

Phase noise@10KHz: -150dBc/Hz

Operating temperature: -20°C to +70°C

Size: 36x27x12.7mm

Typical Applications

Communication System

Time Synchronization

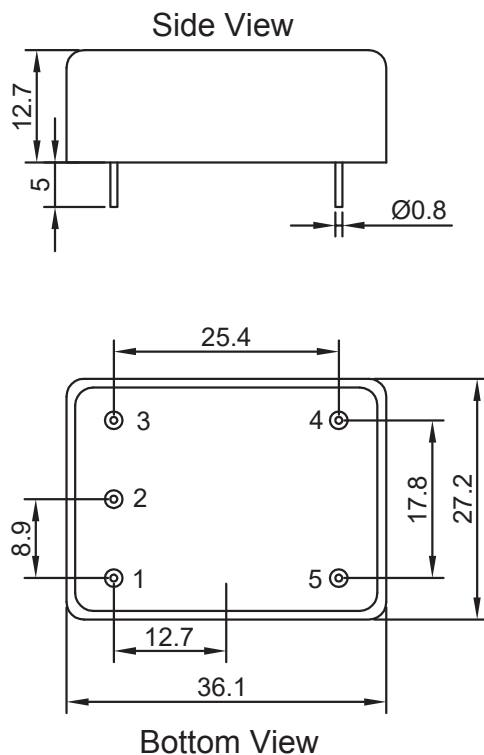
RF/Microwave System

Description

OCXO3627CO-10MHz-A-V is designed for applications where exceptional frequency stability and timing is required. It has both excellent temperature performance and short-term stability. These characteristics make it an excellent choice for timing applications.

Mechanical Drawing & Pin Connections

Drawing No: MD220034-1



Pin Connections:

Pin#	Function
1	Control Voltage
2	N.C.
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.		
Operational Frequency	F ₀			10		MHz	
RF Output							
Signal Waveform			CMOS				
Load	R _L			50		pF	
Duty Cycle		@+2.5V	45		55	%	
Power Supply							
Supply Voltage	V _{cc}	±10%		5.0		V	
Power Consumption		Steady state @+25°C			1.5	W	
		Warm-up@ turn on			3.6	W	
Frequency Adjustment Range							
Electronic Frequency Control (EFC)			±1			ppm	
EFC voltage	V _{con}		0.5	2.5	4.5	V	
Linearity			-10		+10	%	
EFC Slope			positive				
Frequency Stability							
Versus Operating Temperature Range		-20°C to +70°C			±10	ppb	
Initial Tolerance @+25°C		Refer to center V _{con}			±0.05	ppm	
Versus supply voltage		±5% change			±3.0	ppb	
Versus load		±5% change			±3.0	ppb	
Warm-up time		< ±10 ⁻⁸ F ₀ Refer to 1 hour after turn on			7	min	
Aging Per Day		Under +25°C after working 30 days			±0.5	ppb	
Aging 1 st Year					±50	ppb	
SSB Phase noise		100Hz			-140	dBc	
		1kHz			-145	dBc	
		10kHz			-150	dBc	
Environmental, Mechanical Conditions							
Storage temperature range	-40°C to +100°C						