



Features and Benefits

- High frequency stability(up to ± 2 ppb over -40°C to $+85^{\circ}\text{C}$)
- Low G Sensitivity (up to 1.5 ppb/g)
- Long Term Stability up to ± 30 ppb per year
- On / Off Function
- +12V Sinewave Output
- Allan deviation less than 0.001 ppb ($1\text{E-}12$) for tau = 1 second
- Surface Mount package

Typical Applications

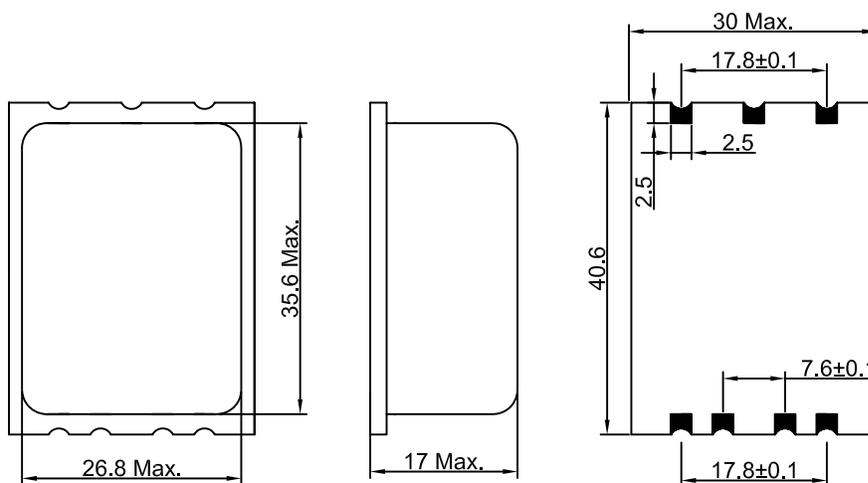
- Base Station
- SATCOM
- Network Clock
- Test Equipment

Description

OXO3562Z-10MHz-A-V offers high frequency stability and low G sensitivity, along with low phase noise and dependable long term stability and quality all in one smart package.

Mechanical Drawing & Pin Connections

Drawing No: MD170032-1



Pin Connections

Pin	Function
1	GND
2	No Connection
3	RF Output
4	Supply Voltage
5	ON OFF
6	Control Voltage
7	Reference Voltage

Unit : mm
1mm=0.0394inch



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency				10		MHz	
Output Waveform			Sinewave				
Output Level			>400			mV	
Output Load		±5%	50			Ω	
Harmonic Suppression			>-30			dBc	
G-Sensitivity			1.5			ppb / g	
Power Supply							
Supply Voltage	V _s	±5%		12		V	10.6V to 12.6V options available
Steady State Current		@ +25°C	<150			mA	
Peak Warm-up Current		@ >-20°C	<400			mA	
Warm-up Time to <±20 ppb		@+25°C	<5			min	
Frequency Adjustment Range							
Frequency Adjust Range			>±400			ppb	
Frequency Adjust Voltage	U _{in}		0		+5	V	
Reference Voltage	U _{ref}			+5		V	
Frequency Stability							
Vs Operating Temperature				<±2.0		ppb	
Vs Supply Voltage changes	V _s	±5%		<±0.5		ppb	<±0.2 ppb available
Vs Load changes		±5%		<±0.5		ppb	<±0.2 ppb available
Aging Per Year				<±30.0		ppb	
Allan Deviation (Short Term Stability)		Tau = 1 sec		<0.001		ppb	
Phase Noise @ 10 MHz		1 Hz offset		<-105		dBc / Hz	
		10 Hz offset		<-135			
		100 Hz offset		<-155			
		1 KHz offset		<-160			
		10 KHz offset		<-161			
Environmental Conditions							
Operating Temperature Range			-40		+85	°C	
Storage Temperature Range			-40		+85	°C	
Vibration Frequency			10		500	Hz	10 – 2000 Hz optional
Vibration Acceleration			10			g	
Shock Acceleration			100			g	
Shock Duration			3 ±1			mS	
Humidity			98			%	
RoHs			Yes				

Note:Contact DEI for daily aging values. General rule: $x \cdot 10^{-x} / \text{year} = x \cdot 10^{-(x+2)} / \text{day}$