OC14 OC36 OC50

Description:

- ●Stability up to ±0.01PPM
- ●Low Aging
- ●Compact Package
- ●PCS Base Stations
- ●Cellular Base Stations
- ●Synthesizer
- ●Measurement Equipment
- ●Digital Switching

Performance Characteristics

Parameter			*OC14 OC36 OC50*				
Frequency Range		F_O	1.000MHz~100.000MHz				
Standard Frequency(MHz)		F_O	4.096 5 8.192 10 16.384 20				
Frequency Accuracy			±0.1PPM (center control voltage)				
Supply Voltage		V_{DD}	B: +5.0VDC±10%		C: +12.0VDC±10%		
Supply Consumption	Warning Stat		3.6W Max				
	Steady State		1.5W Max (at 25°C)				
Output Load			A: TTL 15pF B: TTL 50pF	C: CMOS 15pF D: CMOS 50pF	G: Sine Wave		
Output Duty			40%~60%		—		
Control Voltage Range			See Ordering Information				
Frequency Stability	Temperature Range		±3×10^{-8}				
	Power Supply		±1×10^{-8}				
	Load		±1×10^{-8}				
	Warm up Time		<7min (to be within ±10^{-8}×Fo, Fo Refers to Frequency after 1h operation)				
Rise Time/Fall Time		Tr/Tf	10ns Max		—		
Output Level	"0"Level	V_{OL}	0.4V Max	10%V_{DD}	>0dBm//50Ω		
	"1"Level	V_{OH}	2.4V Min	90%V_{DD}			
Storage Temperature Range		T_{STG}	-40°C~+100°C				
Aging (After 30 days, at+25°C)			B: ±5×10^{-9}/day / ±5×10^{-7}/year / ±3×10^{-6}/10 year				
			C: ±1×10^{-9}/day / ±1×10^{-7}/year / ±1×10^{-6}/10 year				
Phase Noise (at 10MHz)			1Hz	10Hz	100Hz	1KHz	10KHz
			-80dBc/Hz	-120dBc/Hz	-140dBc/Hz	-145dBc/Hz	-150dBc/Hz
Internal Reference Voltage			4V±0.08(V_{DD}=5V)		8V±0.16(V_{DD}=12V)		
Slope and Linearity			Positive / ±10%				

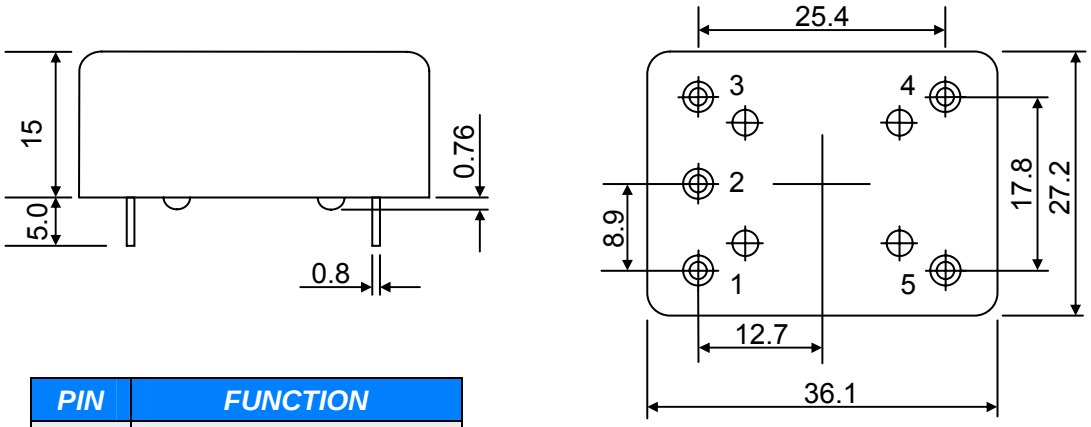
Frequency Stability Over Temperature Range

Temperature Range	*Frequency Stability*					
	B:±1×10^{-8}	C:±3×10^{-8}	D:±5×10^{-8}	E:±1×10^{-7}	G:±3×10^{-7}	H:±5×10^{-7}
A:0°C~+50°C	●	●	●	●	●	●
B:-10°C~+60°C	●	●	●	●	●	●
C:-20°C~+70°C		●	●	●	●	●
D:-40°C~+75°C				●	●	●

Oven Controlled Crystal Oscillators (OCXOs)

OC14 OC36 OC50

Outline Drawing (mm)



PIN	FUNCTION
#1	Control Voltage
#2	Reference Voltage/NC
#3	+DC
#4	Output
#5	GND

Note: Lead - Kovar
Finish – Ni Plated

Ordering Information

OC **36** — **V** **B** **A** **E** **G** **B** — **10** **MHz**

Product Family
OC= OCXO

Package
36= 36.1×27.2×15.0 mm

Control Voltage Range
M= >±1×10^{-6} (Machine Adjust)
V= >±1×10^{-6} (Voltage Adjust)

Supply Voltage
B= ±5.0VDC
C= ±12.0VDC

Temperature
A= 0°C~+50°C
B= -10°C~+60°C
C= -20°C ~+70°C
D= -40°C ~+75°C

Frequency Stability
B= ±1×10^{-8}
C= ±3×10^{-8}
D= ±5×10^{-8}
E= ±1×10^{-7}
G= ±3×10^{-7}
H= ±5×10^{-7}

Output Waveform
A= TTL 15pF
B= TTL 50pF
C= CMOS 15pF
D= CMOS 50pF
G= Sine Wave

Aging
B= ±5×10^{-9}/day, ±5×10^{-7}/year
C= ±1×10^{-9}/day, ±1×10^{-7}/year

Frequency
1.00MHz~100.00MHz

Ordering Example

OC36-VBAEGB-10MHz
OCXO / >±1×10^{-6} (Voltage Adjust) / ±5.0VDC / 0°C~+50°C / ±1×10^{-7} / Sine Wave / ±5×10^{-9}/day, ±5×10^{-7}/year / 10MHz