

AT-Cut Crystal OCXO - Sinewave - 12.0 Volts

- For high stability STRATUM 2 applications
- Low Jitter
- <±0.6ppm overall frequency tolerance over 15 years
- Full size 14 pin dual-in-line package
- Supply Voltage 12.0 Volts
- AT-Cut Crystal
- EFC (Voltage control) as standard

DESCRIPTION

OC14E12A series oven-controlled crystal oscillators are intended for Stratum 2 applications requiring low jitter and tight stability <0.6ppm overall frequency tolerance over 15 years.

SPECIFICATION

Crystal Cut:		AT-cut
Output Waveform:		Sinewave
Supply Voltage:		+12.0 VDC ±0.5V
Frequency Range:		10.0MHz
Initial Calibration Tolerance:		±0.5ppm maximum
Frequen	cy Stability	
	over 0° to +60°C:	±0.2ppm typical ±0.05ppm available
	over -20° to +70°C:	±0.3ppm typical ±0.1ppm available
	over -40° to +85°C:	±0.5ppm typical ±0.2ppm available
	vs. Voltage Change:	<0.1ppm for ±0.5V change
	vs. Ageing:	±0.7ppm first year
		<±4ppm over 10 years
	vs. Load Change:	<0.01ppm for ±5% change
Warm-up Time:		3 minutes maximum
Voltage	Control	
Voltage	Control Control Voltage Centre:	+2.5 Volts (Vcon)
Voltage		+2.5 Volts (Vcon) ±4.0ppm min., ref. to 25°C
Voltage	Control Voltage Centre: Freq. Deviation Range: Control Voltage Range:	, ,
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Voltage	Control Voltage Centre: Freq. Deviation Range: Control Voltage Range:	±4.0ppm min., ref. to 25°C 0V to +5.0Volts Positive: Increasing control voltage increases output
Voltage	Control Voltage Centre: Freq. Deviation Range: Control Voltage Range: Transfer Function:	±4.0ppm min., ref. to 25°C 0V to +5.0Volts Positive: Increasing control voltage increases output frequency.
·	Control Voltage Centre: Freq. Deviation Range: Control Voltage Range: Transfer Function: Input Impedance:	±4.0ppm min., ref. to 25°C 0V to +5.0Volts Positive: Increasing control voltage increases output frequency. 47kΩ minimum
·	Control Voltage Centre: Freq. Deviation Range: Control Voltage Range: Transfer Function: Input Impedance: EFC Linearity:	±4.0ppm min., ref. to 25°C 0V to +5.0Volts Positive: Increasing control voltage increases output frequency. 47kΩ minimum ±10% maximum 1.0W max. at steady state

-10dBc minimum

-70dBc minimum

-65° to +125°C

2000g, 0.3ms 1/2 sine

10 ~2000Hz / 10g

PHASE NOISE (at 10MHz)

Harmonics:

Storage Temperature:

Spurious:

Shock:

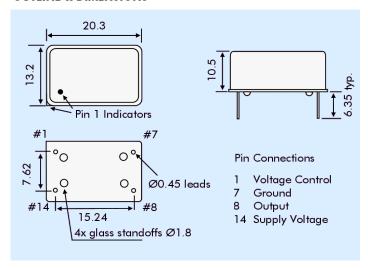
Vibration:

Envionmental

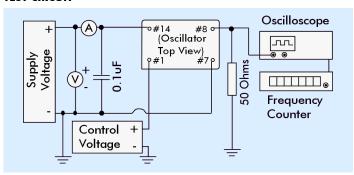
Offset	dBc/Hz
1Hz	-70
10Hz	-100
100Hz	-130
1kHz	-140
10kHz	-145



OUTLINE & DIMENSIONS



TEST CIRCUIT



PART NUMBER FORMAT

