Features

Frequency 10 MHz LVCMOS output +/- 5 ppb from -40°C to 75°C 25.78 x 25.78 x 12.70 mm leaded package 3.3V supply

Typical Applications

Base Stations (LTE 3G / 4G) Wireless Backhaul High Performance Stratum 3E Telecom Switching Timing over Packet Networks (ToPSync) VSAT Timing Reference

Description

The OCXO2525T family offers outstanding frequency stability in a high volume cost efficient design platform.

Physical Dimensions

Pin Connections



Specification

Specification Sym Condition Min. Typ. Max. Only Note Operational Frequency Range F ₀ 10.00000 MHz	
Operational Frequency Range F ₀ 10.00000 MHz Logic Level 1 + 2.4 V LUTTL Cogic Level 0 V Quiput Load 15 pF Rise / Fall Time 10% to 90% 6 Spurious 0 -60 Duty Cycle @1.65V 45 Power Supply Vcc + 3.135 Voltage Vcc + 3.135 Current Consumption Warm-up 10000 Steady-state 1.3 Warm-up Time : To within +/- 10 ppb after 10 minutes referenced to frequency after 60 minutes from turn-on @ room temperature Frequency Stability -40°C to 75°C Ref. to 25°C - 5.0 Vs. temperature -40°C to 75°C Ref. to 25°C @ time of shipment after 15 minutes +/- 1 min warm-up time +/- 100 Daily Aging at time of shipment -5.0 + 5.0 ppb Total Projected 1 yr aging Curve-fit calculation +/- 300 ppb Frequency Verace -0.5 + 0.5 ppb Frequency Retrace -10.0 + 10.0 ppb	
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1 Hz -90.0	
10 Hz -120.0	
SSB Phase noise 100 Hz -135.0 dBc/Hz	
@ 10 MHz -145.0	
10 KHz -155.0	
100 KHz -155.0	
ADEV Tau = 1 second Short Term Stability 0.05 ppb/s	
In Still Air	
Environmental Conditions	
Operating temperature range -40°C to + 75°C	
Storage temperature range -55°C to + 105°C	
Humidity MIL-STD-202, Method 103, Test Condition A; 95% RH @ + 40°C, non-condensing, 240 nours	
Vibration (non-operating) MIL-STD-202, Method 201; U.U6 inches Total peak to peak, 10 to 55 HZ	
Shock (non-operating) [WIL-STD-202, Method 213, Test Condition J; 30g's, 11 milli-seconds, nair-sine	