

Temperature Compensated Crystal Oscillators (TCXO's)

TC-200



Description:

Vectron International has introduced a series of low jitter complementary PECL TCXO's for use in SONET Minimum Clock (SMC) applications and is available in Output frequencies from 311.04 MHz to 777.6 MHz.

Features:

- True SONET Minimum performance
- Ultra low Jitter
- 3.3 Vdc or 5 Vdc operation
- Complementary PECL output

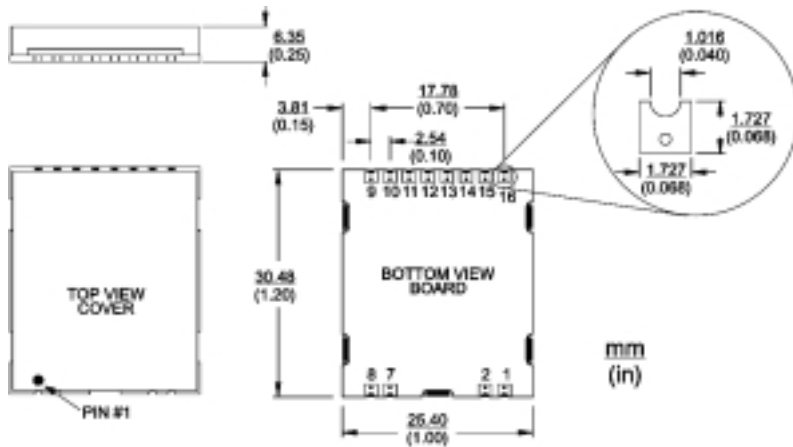
Performance Characteristics

Parameter	Characteristics
Frequencies:	311.04 MHz to 777.6 MHz
Package Size:	30.48 x 25.4 x 6.35 mm (1.2" x 1.0" x 0.25")
Supply Voltage (Vcc): (other options are available upon request)	C = 5.0 Vdc $\pm 5\%$ D = 3.3 Vdc $\pm 5\%$
Current:	<200 mA
Output:	Complementary PECL
Output Level (@ +25°C):	Voh ("1") = Vcc Vol ("0") = Vcc - 1.63 V max
Rise/Fall Time:	<400 ps (20% to 80%)
Symmetry (Duty Cycle):	50/50 $\pm 5\%$ @ Vcc - 1.3 V
Temperature Stability:	C-416 - ± 4.1 ppm over 0°C to +70°C (per GR-253-CORE : R5-126) F-416 - ± 4.1 ppm over -40°C to +85°C (per GR-253-CORE : R5-126) NOTE: Tighter stabilities and wider temperature ranges are available, please consult the factory.
Initial Accuracy @ +25°C:	B ± 5 ppm max after reflow, Total Stability <20 ppm All Causes.
Aging:	<10 ppm for ten years
Jitter Generation:	<1 ps rms from 12 kHz to 80 MHz
Frequency vs. Supply:	< ± 0.2 ppm for a $\pm 5\%$ change in supply voltage
Electrical Frequency Adjust:	A ± 40 ppm min., 0 to Vcc, positive slope (per GR-253-CORE: R5-129)

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Outline Drawing



Pin Out Information

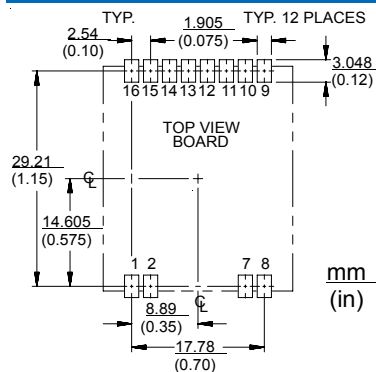
Pin	Function
1	Electrical Frequency Adjust; 0 to Vcc. or No Connect
2	Ground
3	Missing
4	Missing
5	Missing
6	Missing
7	Ground
8	Vcc - Supply Voltage
9	Vcc - Supply Voltage
10	Lock Detect
11	Ground
12	Output Signal - Q
13	Ground
14	Comp Output Signal - \bar{Q}
15	Ground
16	Enable / Disable Floating = Enabled Logic "0" = Disabled

TCXO

Standard Frequencies

311.04 MHz	SONET
622.08 MHz	OC-12, STM4
625.00 MHz	10 G / 16
644.5313 MHz	10.3125 G / 16
666.5143 MHz	OC-12 FEC 15/14
669.3266 MHz	OC-12 FEC 255/237
777.60 MHz	SONET

Pad Layout



Ordering Information

