

Helping Customers Innovate, Improve & Grow



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
- Complementary PECL output
- Frequency Range: 311.04 MHz to 777.6 MHz
- Previous Model: TC-200

Applications

- SONET Minimum Clock

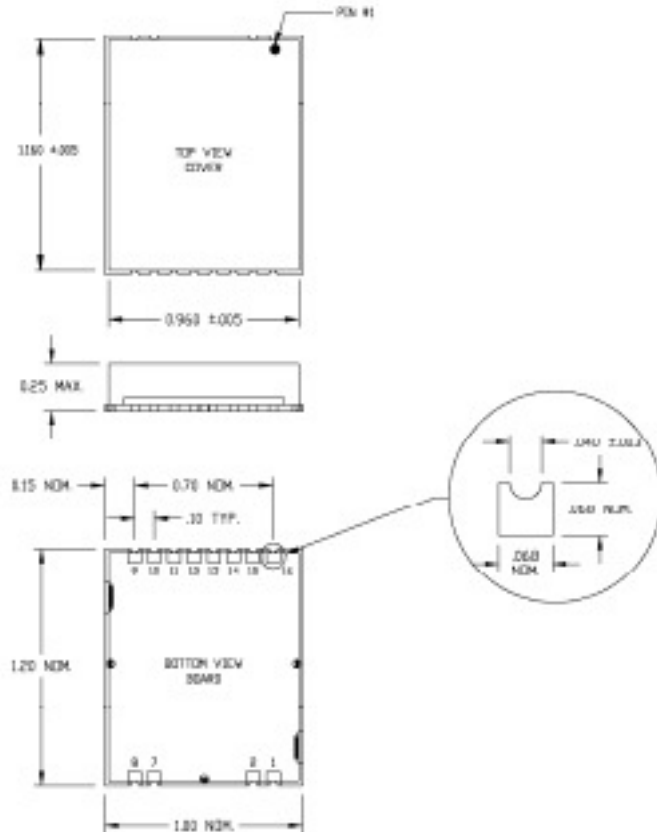
Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
Frequency Stabilities ¹					
vs. operating temperature range (referenced to +25°C)	-4.1 -4.1		+4.1 +4.1	ppm ppm	-40... +85°C 0... +70°C
Initial Tolerance	-5.0		+5.0	ppm	@ +25°C
Total Stability			<20	ppm	All Causes
vs. supply voltage change	-0.2		+0.2	ppm	Vs ± 5%
Jitter Generation			<1	ps	12 kHz to 80 MHz
Aging			<10	ppm	for 10 years
Supply Voltage (Vs)					
Supply voltage (Standard)	3.135	3.3	3.465	VDC	
Supply voltage (Option)	4.75	5.0	5.25	VDC	
Current			200	mA	

Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
RF Output					
Signal	Complementary PECL				
Load		15		pF	100 k ohm // 10 pF
Signal Level (Vol)			V _{cc} - 1.63 V	V	
Signal Level (Voh)	V _{cc}			V	
Rise/Fall Time			400	ps	(20% to 80%)
Duty cycle	45		55	%	@ V _{cc} - 1.3 V
Frequency Tuning (EFC)					
Tuning Range	±40			ppm	0 to V _{cc}
Tuning Slope	Positive				

Outline Drawing / Enclosure



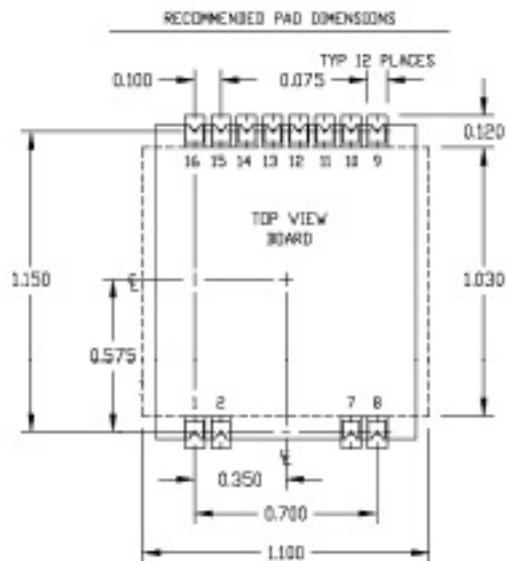
Dimensions in inches

Type C		
Code	Height "H"	Pin Length "L"
0	0.25 (6.35mm)	NA

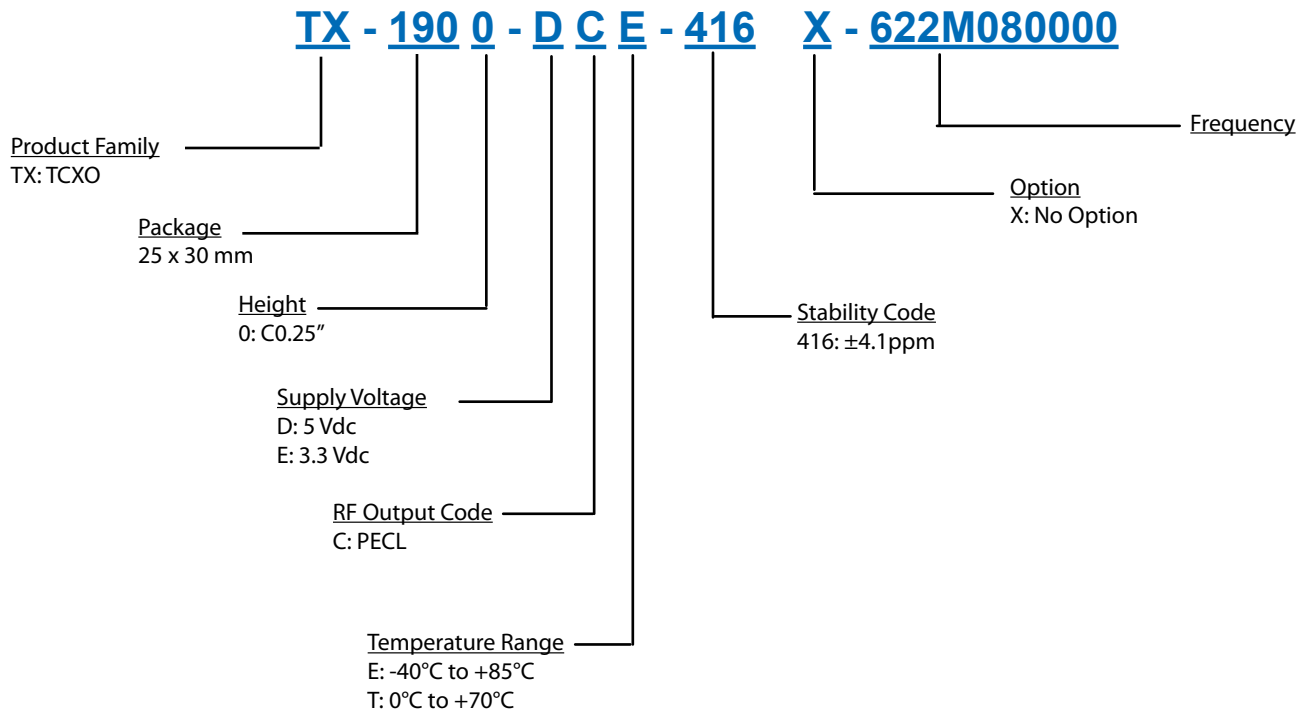
Code	Height "H"	Pin Length "L"
0	0.25 (6.35mm)	NA

Pin Connections	
1	Electrical Freq. Adjust / No Connect
2, 7, 11, 13, 15	Ground
3-6	Missing
8, 9	Supply
10	Lock Detect
12	Output Signal - Q
14	Comp Output Signal - Q
16	Enable / Disable Floating = Enabled Logic "0" = Disabled

1	Electrical Freq. Adjust / No Connect
2, 7, 11, 13, 15	Ground
3-6	Missing
8, 9	Supply
10	Lock Detect
12	Output Signal - Q
14	Comp Output Signal - Q
16	Enable / Disable Floating = Enabled Logic "0" = Disabled



Ordering Information



Notes:

1. Contact factory for improved stabilities or additional product options. Not all options and codes are available at all frequencies.
2. Unless other stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C).
3. Phase noise degrades with increasing output frequency.
4. Subject to technical modification.
5. Contact factory for availability.

For Additional Information, Please Contact

USA:

Vectron International
267 Lowell Road
Hudson, NH 03051
Tel: 1.888.328.7661
Fax: 1.888.329.8328

Europe:

Vectron International
Landstrasse, D-74924
Neckarbischofsheim, Germany
Tel: +49 (0) 3328.4784.17
Fax: +49 (0) 3328.4784.30

Asia:

Vectron International
1F-2F, No 8 Workshop, No 308 Fenju Road
WaiGaoQiao Free Trade Zone
Pudong, Shanghai, China 200131
Tel: 86.21.5048.0777
Fax: 86.21.5048.1881

Disclaimer

Vectron International reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.

Rev: 2/24/2009 daf