

### Features

- Wide Electrical Tuning
- Excellent Linearity
- Low Jitter
- Excellent Frequency Stability
- Wide Operating Temperature Range

### Options

- Operation at OC-768 and FEC OC-768

### Description

The Herley-CTI Series VTDR Dielectric Resonator Oscillators have been specifically designed for SONET/SDH applications. The VTDR series utilizes ultra-low-noise Dielectric Resonator Oscillators (DROs) for fundamental operation at 9.995328 GHz or 10.66422857 GHz. The series offers wide electrical tuning

and excellent linearity with superior jitter performance. Herley-CTI's broad experience and expertise in design and manufacturing can provide a solution for all of your SONET requirements.

### Typical Performance Specifications

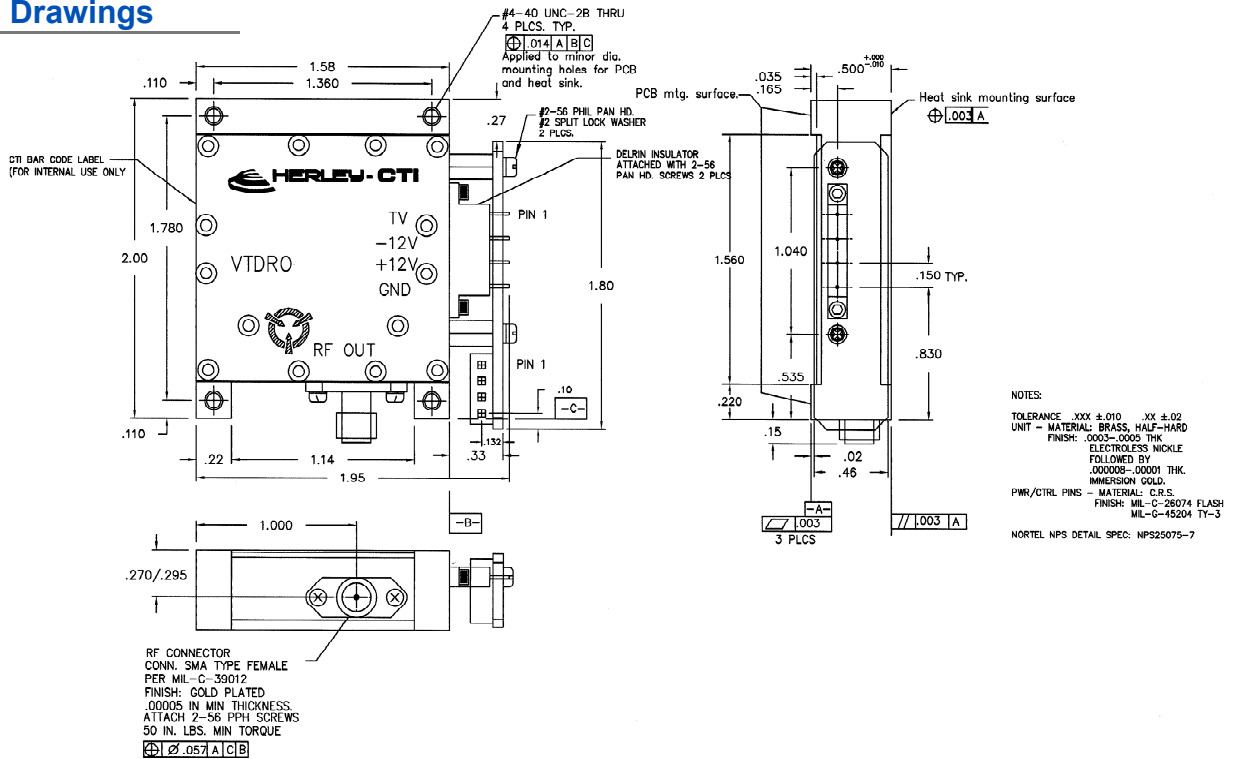
Parameter	Symbol	Min	Typ	Max	Units	Conditions
Output Frequency	F <sub>O</sub>	9951.28	9953.28	9955.28	MHz	
Tuning Voltage*	V <sub>t</sub>	-5		+5 Vdc		
Tuning Sensitivity		1.75	2	3.5	MHz/V	
Power Output	P <sub>O</sub>	-2	1	4	dBm	All Conditions
Load VSWR				1.5:1		All Phases
Output Impedance			50		Ohms	
Spurious			-65		dBc	
Harmonics			-20		dBc	
Frequency Stability			±5		ppm/°C	
DC Power*	V <sub>CC</sub> V <sub>EE</sub>	+11.75 -12.25	+12 -12	+12.25 -11.75	Vdc	
Supply Current I <sub>CC</sub>		100		mA		Positive Supply
Supply Current I <sub>EE</sub>		25		mA		Negative Supply
Mod Sensitivity Variation		-30		30	%	
Modulation Sensitivity		175		350	ppm/v	@ F <sub>O</sub>
DC Resistance of Tune Port		5			kOhm	
Capacitance of Tune Port				1000	pf	
Modulation BW of Tune Port		1.5		MHz		
Output Return Loss		10	12		dB	
Operating Temperature		0		+70	°C	Case Temperature
Storage Temperature -		40		+125	°C	

Note: Specifications subject to change without notice.

\*Single positive voltage polarity models available with +12 Vcc and 2 to 12 V tuning voltage. Contact factory.



### Outline Drawings



### Typical Phase Noise

