

Communication Techniques, Inc.

SONET Products Series VTDRO

Features

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



Description

Communication Techniques, Inc. Series VTDRO Dielectric Resonator Oscillators have been specifically designed for SONET/SDH applications.

The VTDRO 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.

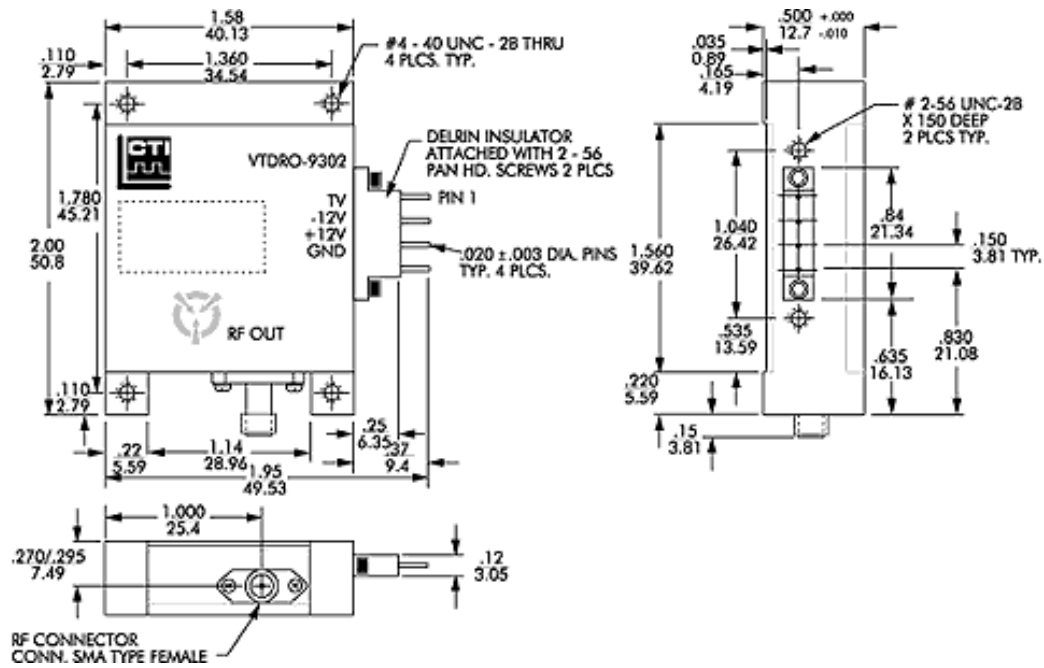
CTI's broad experience and expertise in design and manufacturing can provide a solution for all of your SONET requirements.

Performance Specifications

Parameter	Symbol	Min	Type	Max	Units	Condition
Output Frequency	F _o	9951.28	9953.28	9955.28	MHz	
Tuning Voltage*	V _t	-5		+5	VDC	
Tuning Sensitivity		1.75	2	3.5	MHz/V	
Power Output	P _o	-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 _{CC} V _{EE}	+11.75 -12.25	+12 -12	+12.25 -11.75	VDC	
Supply Current	I _{cc}		100		mA	Positive Supply
Supply Current	I _{EE}		25		mA	Negative Supply
Mod Sens Variation		-30		30	%	
Modulation Sens		175		350	ppm/v	@F _o
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	

*Single positive voltage polarity modules available with +12 V_{CC} and 2V to 12V tuning voltage.
Contact Factory.

Outline Drawing



Phase Noise - Typical

