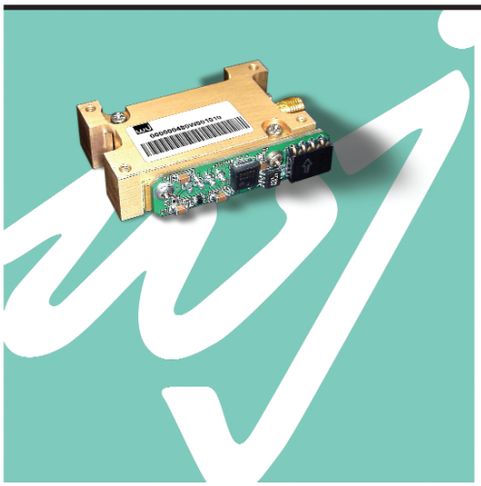
WJ VC1001

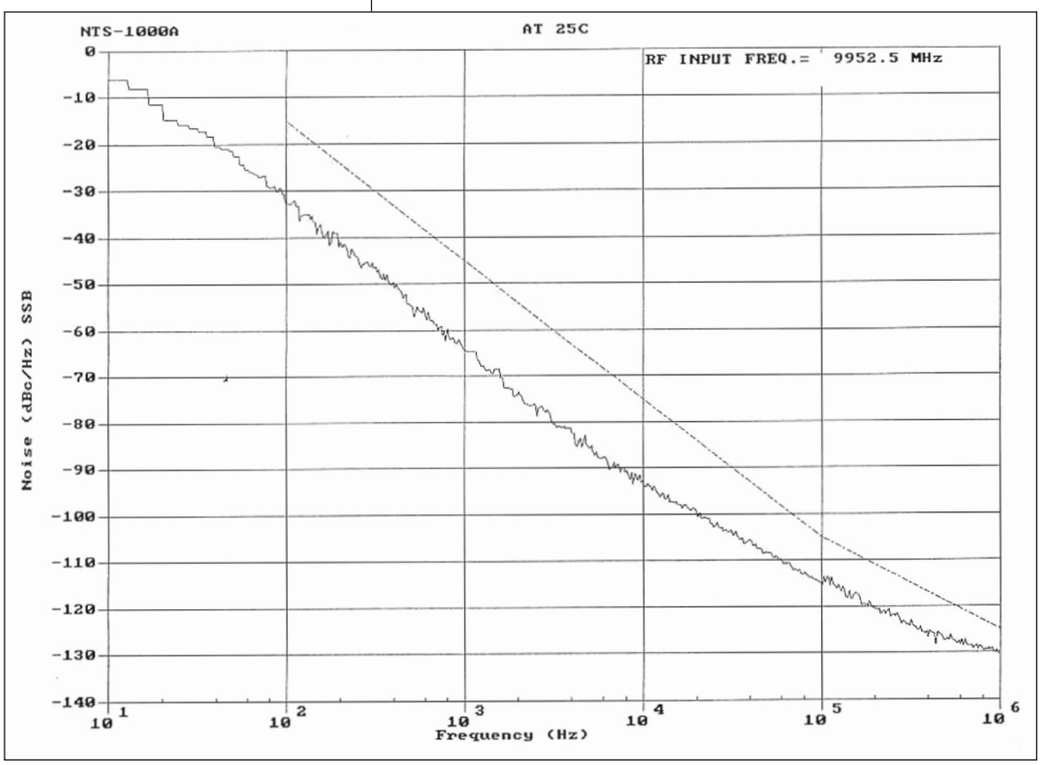
DRO for OC–192
An RF evolution for OC-192



- **10 Gbit/s**
- **Output Buffer Amplifier**
- **Phase Noise –95dBc/Hz Typ. at 10 kHz offset**

OC-192 Clock Oscillator for SONET/SDH Systems

The VC1001 provides an ultra-stable, fundamental 9953.28MHz sinewave output signal, suitable for critical timing applications such as those found in SONET/SDH OC-192 systems. Typical performance characteristics include; phase noise of –95dBc/Hz at 10kHz offset with +1dBm nominal output power, and a 20MHz tuning range over a –5V to +5V control voltage. The unit requires +12V @ 175mA and –12V @ 25mA bias.



THE COMMUNICATIONS EDGE™
WJ Communications, Inc
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SPECIFICATIONS

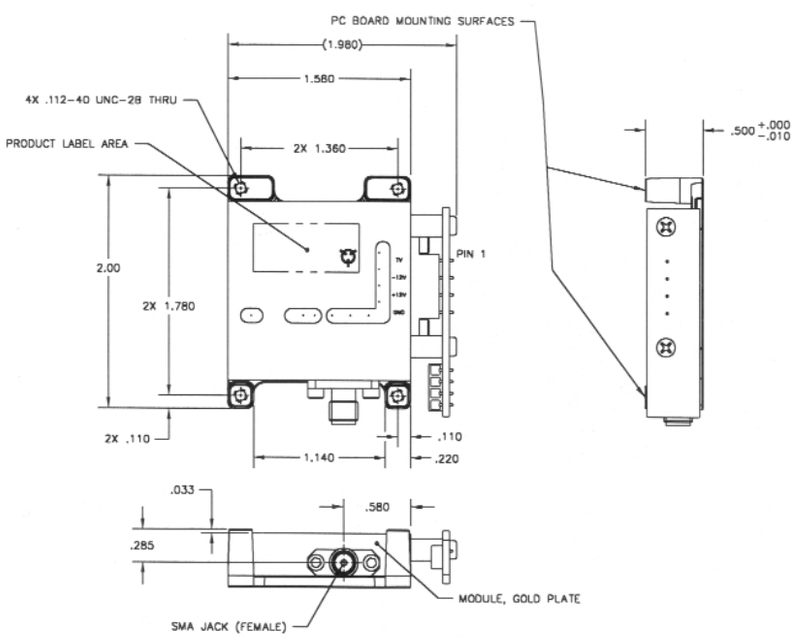
Characteristics	Typical	Guaranteed +25°C	Guaranteed 0°C to +70°C
Frequency @ Tune Voltage of 0 Volts (MHz)	9953.28	9953.28±2	9953.28±4
Frequency Tuning Range (MHz)	20		
Phase Noise (dBc/Hz)			
1 kHz offset	-65		-45
10 kHz offset	-95		-75
100 kHz offset	-120		-105
1 MHz offset	-140		-125
Output Power (dBm)			
Max			+4
Min	+1		-2
Tuning Voltage (Volts)	-5 to +5	-5 to +5	-5 to +5
Modulation Sensitivity (MHz/Volt)			1.75-3.5
Modulation Bandwidth (MHz)			1.5
Harmonic Suppression (dBc)			
nf_0			-30
In-Band Spurious Suppression (dBc)			-65
RF Output VSWR			2.0:1
Frequency Pushing (kHz/Volt)			20
Frequency Pulling* (kHz)			100
Bias Current (mA)			
+12V			175
-12V			25

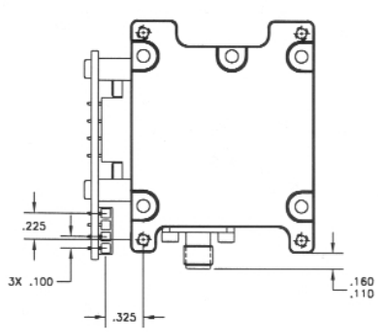
* Measured looking into a 2.0:1 load mismatch at all phase angles.

Absolute Maximum Ratings

Operating Temperature	0°C to +85°C
Storage Temperature	-55°C to +125°C
DC Voltage	0 to 15 V
Tune Voltage	-7 to +12 V

Weight: 4.0oz





Notes:
1. Dimensions are in inches
2. Tolerances are .xxx ± 0.15 and .xx ± 0.02
3. Dimensions given specify position #2-56 tapped holes for backside blind rear mount
4. Dimensions in parentheses are reference only

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