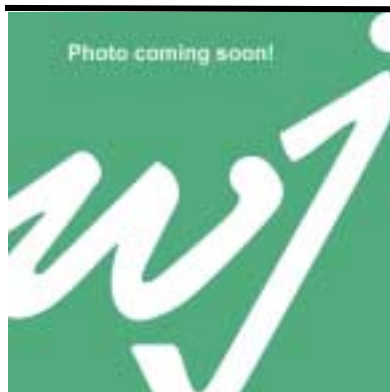


WJ VC4001 *Preliminary*

WJ's DRO for OC-768

An RF evolution for OC-768



- 40 Gbps ($f_o = 39,813.12 \pm 16\text{MHz}$)
- 80 MHz Tuning Range
- Output Buffer Amplifier
- Phase Noise -83dBc/Hz Typ.
At 10 kHz offset
- 14 MHz/Volt Mod. Sensitivity

OC-768 Clock Oscillator for SONET/SDH Systems

The VC4001 provides an ultra-stable, fundamental 39813.12 MHz sinewave output signal, suitable for critical timing applications such as those found in SONET, DWDM, and switching systems. Typical performance characteristics include; phase noise of -83dBc/Hz at 10 kHz offset, +1dBm nominal output power and 80MHz tuning range with a -5 to $+5$ control voltage. The unit requires +12V @ 225mA and -12V @ 25mA bias.

Data Available Soon

THE COMMUNICATIONS EDGE™

WJ Communications, Inc.

1-866-618-7704 • 408-577-6620 fax • sales@wj.com

web site: www.wj.com

VC4001 DRO CLOCK OSCILLATOR SPECIFICATIONS

Characteristics	Typical	Guaranteed	
		+25°C	0°C to +70°C
Frequency ⁽¹⁾ @ Tune Voltage of 0 Volts (MHz)	39813.12	39813.12±8	39813.12±16
Frequency Tuning Range (MHz)	80		
Phase Noise (dBc/Hz)			
1 kHz offset	-58		-33
10 kHz offset	-83		-63
100 kHz offset	-108		-93
1 MHz offset	-133		-113
10 MHz offset	-139		-133
Output Power (dBm)			
Max			+4
Min	+1		-2
Tuning Voltage (Volts)	-5 to +5	-5 to +5	-5 to +5
Modulation Sensitivity (MHz/Volt)			7.0 - 14.0
Modulation Bandwidth (MHz)			1.5
Harmonic Suppression (dBc)			
nf ₀			-30
n/2f ₀			-40
In-Band Spurious Suppression (dBc)			-65
RF Output VSWR			2.0:1
Frequency Pushing (kHz/Volt)			80
Frequency Pulling ⁽²⁾ (kHz)			400
Bias Current (mA)			
+12V			225
-12V			25

⁽¹⁾ Higher frequency options available to support greater forward error correction.

⁽²⁾ Measured looking into a 2.0:1 load mismatch at all phase angles.

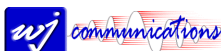
Absolute Maximum Ratings

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

Outline Drawing Available Soon

Notes:

- Unit weight .52 ounces MAX.
- Dimensions are expressed in INCHES.
- Tolerance .XXX ± .015
.XX ± .02

**THE COMMUNICATIONS EDGE™**

WJ Communications, Inc.

1-866-618-7704 • 408-577-6620 fax • sales@wj.comweb site: www.wj.com

The information contained in this document has been carefully checked and is believed to be reliable as of the date of publication. However, WJCI makes no express or implied warranties or representations regarding same and assumes no responsibilities for inaccuracies. WJCI reserves the right to change products and specification, or to discontinue products without notice. For latest information, please contact WJCI sales at 1-800-951-4401.

Revision: 0901.01