OUTPUT
Frequency
100 MHz
Level
+13 dBm ±2 dB into 50 ohms
STABILITY
Aging
1 x 10 ⁻⁶ per year
after 30 days operating, typical
Phase Noise L(f), Static
100 H= 120 dDa/H=
100 Hz -130 dBC/Hz 1 kHz -150 dBc/Hz 10 kHz -165 dBc/Hz 100 kHz -165 dBc/Hz
10 kHz -165 dBc/Hz
100 kHz -165 dBc/Hz
Phase Noise L(f), Dynamic, typical
10 Hz -72 dBc/Hz
50 Hz -73 dBc/Hz
100 Hz -100 dRc/Hz
100 Hz -100 dBc/Hz 300 Hz -130 dBc/Hz
1 kHz -150 dBc/Hz
2 kHz -160 dBc/Hz
Temperature Stability
-7
±5 x 10 ⁻⁷ , 0° to +50°C (Ref +25°C)
Harmonics
≤ -30 dBc
Spurious
≤ -90 dBc, excluding power
supply line related spurs
MECHANICAL
Dimensions
2.8" x 3.0" x 1.15"
Connectors
SMA(f) and solder pins on side
Packaging
Nickel-plated machined
aluminum case – (CVI-1)
POWER REQUIREMENTS
Warm-Up Power
≤ 6 Watts for 5 minutes
Total Power
≤ 3 Watts at +25°C
Supply Voltage
+15 VDC ±5%

ADJUSTMENT				
Mechanical Tuning				

±4 x 10⁻⁶

Electrical Tuning

±5 x 10⁻⁷ min, ±5 VDC Negative slope

CRYSTAL

Type

100 MHz SC-cut (low-g)

Acceleration Sensitivity

≤ 3 x 10⁻¹⁰/g per axis, typical

ENVIRONMENTAL

Operating Temperature

0° to +50°C

Storage Temperature

-40° to +85°C

Vibration Level

10 Hz to 2 kHz $0.01 \text{ g}^2/\text{Hz}$

Resonance

(Internal Mount Natural Frequency)

~50 Hz, goal

OTHER

Label

Use conventional label with the following information: 501-24980 (Current Rev.) 100 MHz Citrine +15 VDC Serial # - Date Code

Test Data

Output Level

Phase Noise, Static and Dynamic

Temperature Stability Harmonics, Spurious

Power - Warm-up and Total

Tuning – MT and ET

REV	DATE	REVISION RECORD	DWN	AUTH
-	09-20-11	Initial Release	PAC	
Α	10-08-12	1 kHz dynamic phase noise performance	PAC	



