REVISION RECORD REV DATE 02-27-12 Initial Release -INPUT Packaging Frequency Nickel-plated machined 5 MHz, ±2 x 10⁻⁶ aluminum housing Mounting Level Tapped holes on sides, 16 places +7 dBm ±5 dB into 50 ohms Through holes, 4 places OUTPUT Frequency Threaded inserts on base, 4 places 16 X .060-80 Ø0.0930 Dia. 100 MHz POWER REQUIREMENTS Tapped Holes Mounting Holes 2.500 Supply Voltage Level - 1.750 +13 dBm ±2 dB into 50 ohms +15 VDC ±5% ~ 1.665 STABILITY Warm-Up Power Output Phase Noise L(f) ≤8 Watts at start-up for 5 minutes 0 -1.200(Free-Running) at +25° C **Total Power** -128 dBc/Hz 100 Hz ≤5 Watts at steady state +25°C 1 kHz -155 dBc/Hz 10 kHz -170 dBc/Hz ADJUSTMENT Loop BW 100 kHz -171 dBc/Hz 3.50 - 0.000 Target Bandwidth: < 5 Hz Aging $\pm 1 \times 10^{-6}$ per year after 30 days Type 2 Loop CRYSTAL operating, typical **Temperature Stability** SC-cut $\pm 5 \times 10^{-7}$ free-running from 0 to $\pm 50^{\circ}$ C, -- 1.200 (Ref. +25°C) Phase Lock Alarm - 1.665 0 TTL 4 X 2-56 Locked: +3.5 VDC to +5.2 VDC (Hi) Threaded Inserts -0.000 Out-of-Lock: +0.8 VDC max (Lo) 2 0.000 -0.218 0.800 0.385 0.443 0.800 1.250 0.240 1.165 Phase Lock Voltage Monitor T Voltage monitor pin supplied ~ 0.400 CONN SPECTRAL PURITY О О «У АМ - 0.160 Harmonics V $\overline{\mathbf{O}}$ - 0.000 0.80 RF Out ≤-30 dBc - 0.150 +V RF OUT 1 AI M - 0.300 Sub-Harmonics GND REF INPUT ≤-50 dBc PLL Divider Products ≤-60 dBc Spurious ≤-70 dBc Wenzel Associates, Inc. W MECHANICAL Austin. Texas Dimensions Title: 2.5 x 3.5 x 0.8" Standard 100 MHz-SC Phase Lock Crystal Oscillator Connectors Drawn: P/N· Date: Rev: SMA's and solder pins on side 501-25620 02-27-12 -Feed-thru terminals for lock alarm, Tolerances: 0.XXX Dec: 0.XX Dec: FSCM: supply and phase lock voltage monitor (except as noted) 62821 ±0.030" ±0.010" Dimensions are in inches

DWN

PAC

-1.490

-1.250

-1.010

-0.000

-1.010

-1.250

-1.490

Function

RF Signal Out

Ground, Case

Ref:

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SPR

Alarm

Supply Voltage

Phase Lock Voltage

Reference Signal In

0.240

AUTH

JR