

EXTERNAL REFERENCE INPUT**Input Frequency**

5 or 10 MHz, ±2 ppm

Input Level

+7 dBm ±6 dB into 50 ohms

OUTPUT**Output Frequency**

10 MHz

Output Level

+13 dBm ±2 dB into 50 ohms

STABILITY, free running**Aging**5 x 10⁻¹⁰ /day after 24 hours operating5 x 10⁻⁸ /year, second year, typical3 x 10⁻⁸ per year, thereafter**Phase Noise L(f)**

	Standard	Premium
10 Hz	-130 dBc/Hz	-135 dBc/Hz
100 Hz	-150 dBc/Hz	-155 dBc/Hz
1 kHz	-160 dBc/Hz	-163 dBc/Hz
10 kHz	-160 dBc/Hz	-163 dBc/Hz

Temperature StabilityE: ±5 x 10⁻⁹, 0° to +50°C (Ref +25°C)F: ±1 x 10⁻⁸, -20° to +70°C (Ref +25°C)G*: ±1 x 10⁻⁷, -55° to +85°C (Ref +25°C)**SPECTRAL PURITY****Harmonics**

≤ -30 dBc

PLL Divider Products

≤ -50 dBc

Non-Harmonic Spurious

≤ -80 dBc, excluding power supply line related spurs

MECHANICAL**Packaging**

Solder sealed steel can

Dimensions

1.75 x 2.94 x 0.6" housing

2.25 x 3.40" footprint with brackets

Connectors

RF Input/Output: SMA(f)

Power, Monitoring: Feed Thru Solder Pins

GND: Ground Turret

POWER REQUIREMENTS**Supply Voltage**

+15 VDC ±5% or +12 VDC ±5%

Warm-Up Power

≤ 6 Watts for 5 minutes at +25°C

G* ≤ 8 Watts for 5 minutes at +25°C

Total Power

≤ 2.5 Watts at +25°C

G* ≤ 4 Watts at +25°C

ADJUSTMENT**Loop BW**

Type 2 Loop

Target Bandwidth: ≤ 0.1 Hz

CRYSTAL**Type**

10 MHz SC-cut

PHASE LOCK STATUS**Phase Lock Alarm (Pin 5)**

Locked: +3.5 VDC to +5.2 VDC (Hi)

Out-of-Lock: +0.8 VDC max (Lo)

REV	DATE	REVISION RECORD	DWN	AUTH
-	02-05-14	Initial Release	CB	PAC

Ordering Options

-xx	Voltage	Phase Noise L(f)	Package	Temp (Ref +25 °C)
01	+15V	Standard	A	E
02	+15V	Standard	A	F
03	+15V	Standard	A	G
11	+15V	Premium	A	E
12	+15V	Premium	A	F
13	+15V	Premium	A	G
21	+12V	Standard	A	E
22	+12V	Standard	A	F
23	+12V	Standard	A	G
31	+12V	Premium	A	E
32	+12V	Premium	A	F
33	+12V	Premium	A	G

Wenzel Associates, Inc.

Austin, Texas

Title:

**10 MHz-SC Phase Lock Crystal Oscillator V1
(LBW=0.1Hz)**

P/N:

501-27506-xx

Rev:

-

Date:

02-05-14

Drawn:

Ref:

STD

Tolerances:
(except as noted)
Dimensions are in inches

0.XX Dec:

±0.030"

0.XXX Dec:

±0.010"

FSCM:

62821

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