

2LPL SERIES



0.010 GHz to 15 GHz (IN BANDS)



FEATURES

- Low cost
- Phase locked to external standard or internal crystal reference
- External reference Cleanup
- Low phase noise
- Small package
- 100% burn-in and temperature testing
- Three-year warranty

The 2SLS Series phase-locked source offers excellent phase noise and spurious performance in a miniature 2.0" width x 2.0" length x 0.61" height housing and is available in fixed frequencies from 10 MHz to 15 GHz in a single form factor configuration. Units can operate from either external reference, or internal TCXO with stability as low as 500 PPB. Flexible internal DC regulators allow operating DC from +6.5 VDC to +28 VDC.



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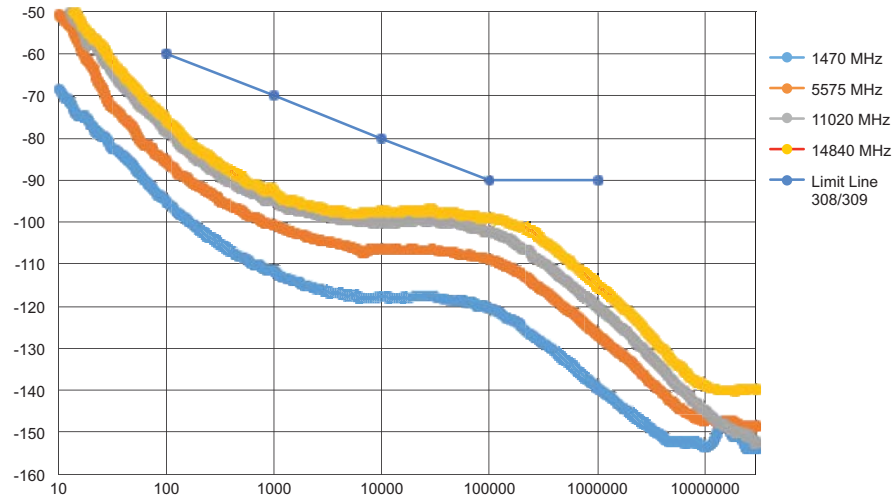
SPECIFICATIONS	UPCONVERTERS
Output frequency range	0.010 GHz to 15 GHz
Output power	+13 dBm minimum
Output harmonic	-25 dBc maximum
Output spurious	-60 dBc maximum
Phase noise	See graph
Input reference frequency	1 MHz to 200 MHz
Input reference power level	0±3 dBm
Input impedance	50 ohms
Load VSWR	1.5:1 nominal
DC power requirements	+6.5 volts to +28 volts at 400 mA maximum
Phase lock alarm	TTL High in lock, low out of lock

PHASE NOISE SPECIFICATIONS (dBc/Hz)	OFFSET (Hz)						
	10	100	1K	10K	100K	300K	1M
1470 MHz	-68	-95	-111	-117	-120	-148	-139
5575 MHz	-50	-85	-100	-106	-108	-137	-126
11020 MHz	-45	-78	-94	-99	-102	-131	-120
14840 MHz	-45	-75	-92	-97	-98	-126	-115



PHASE NOISE SPECIFICATIONS

PHASE NOISE CHARACTERISTICS



GENERAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

Outline drawing	218212
Size	2.0" x 2.0" x 0.61"
Weight	≤ 100 grams
RF connectors	SMA female
DC connectors.....	9-pin JST™

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating.....	-40 °C to +80 °C
Storage	-50 °C to +100 °C
Humidity	95% at 40 °C noncondensing
Shock (survival)	30 g's, 10 ms pulse
Vibration (survival)	20 Hz to 2000 Hz random to 4 g's rms

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OUTLINE DRAWING

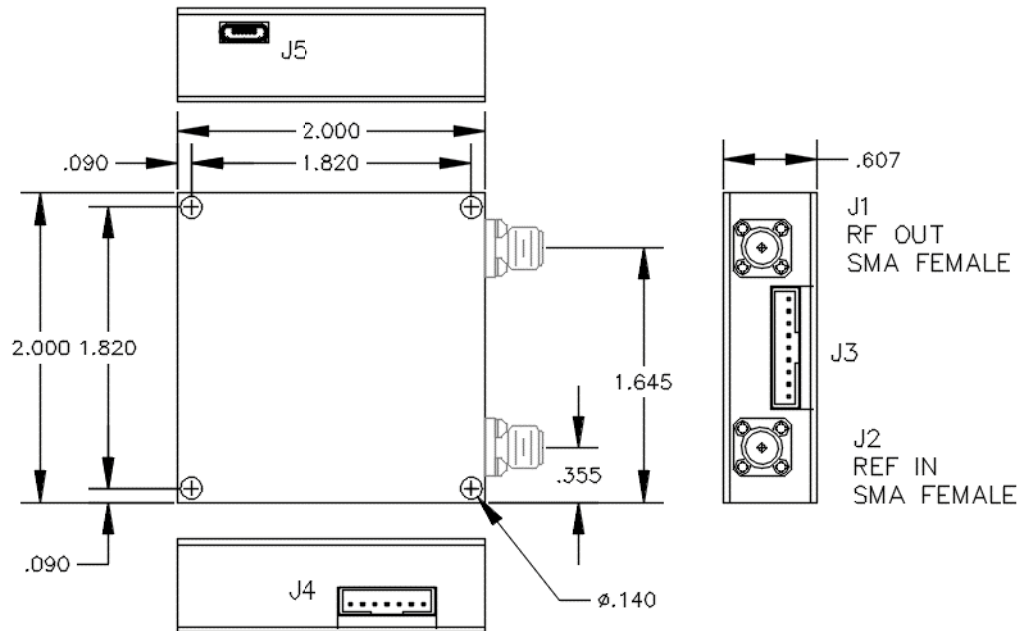
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J3 DC PWR/CONTROLS
9 PIN JST

PIN #	SIGNAL
1	+VCC_IN
2	GND
3	TTL_ALARM
4	PHASE_VOLT
5	GND
6	RS422_RX+
7	RS422_RX-
8	RS422_TX-
9	RS422_TX+

J5 USB
MICRO-USB CONNECTOR

PIN #	SIGNAL
1	+5V_USB
2	USB_D-
3	USB_D+
4	NC
5	GND



Note: Dimensions shown are in inches and those shown in brackets [] are in millimeters.

The material presented in this datasheet was current at the time of publication. L3 Narda-MITEQ's continuing product improvement program makes it necessary to reserve the right to change our mechanical and electrical specifications without notice. If either of these parameters is critical, please contact the factory to verify that the information is current.

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