

Ultra-Low Phase-Locked Dielectric Resonator Oscillator PLDRO Series 6 - 14 GHz

FEATURES

- Ultra-Low Phase Noise
- Very fine frequency resolution
- Reference from 5 to 100MHz
- Internal reference available
- Small package
- Low power consumption
- 100% Burn-in & Environmentally tested
- 3 years Warranty

Applications

- Satellite Communication
- Weather Radar
- Automatic Test Equipment
- Civil Aviation Radar
- Defense application
- Broadcast

Electrical Specification Local Oscillator 1 and 2		
Output Frequency range	6 to 14	GHz
Power Output	> +13	dBm
Harmonics (maximum) ¹	< -20	dBc
Reference Frequency ²	5 to 100	MHz
Spurious (maximum)	-75	dBc
Phase Noise dBc / Hz see next page		
Reference input power	0 ±3	dBm
Supply Voltage	+5.6, +8, +12 or +15	V
Voltage tolerance (max.)	±0.2	V
Current (max.)	370	mA
Load VSWR (max.)	2:1	
Alarm ³ TTL in-lock	High	

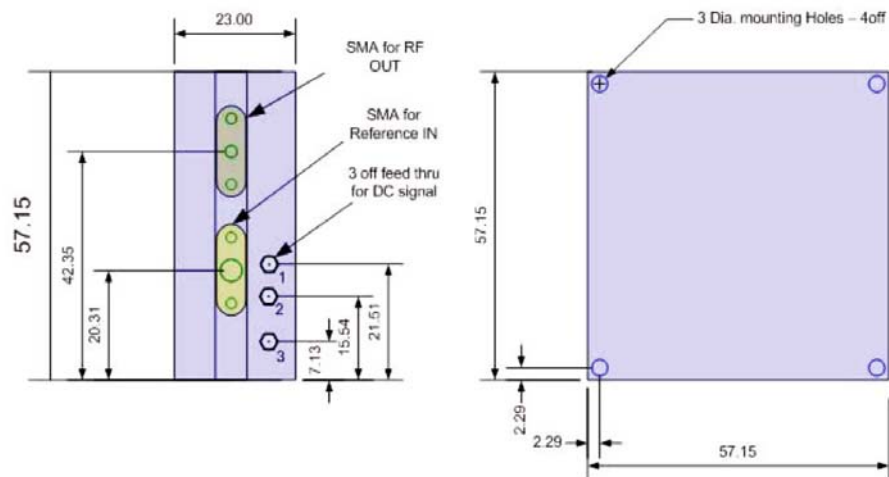


- Notes:**
- Options available for better harmonics
 - Reference frequency >100 MHz available
 - Alarm in-lock
L-TTL : low in lock, high out of lock
H-TTL : high in lock, low out of lock

Mechanical dimensions

(all units in mm.)

- Connection:
- Lock Detect
 - Supply Voltage
 - Ground



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Physical Specification:

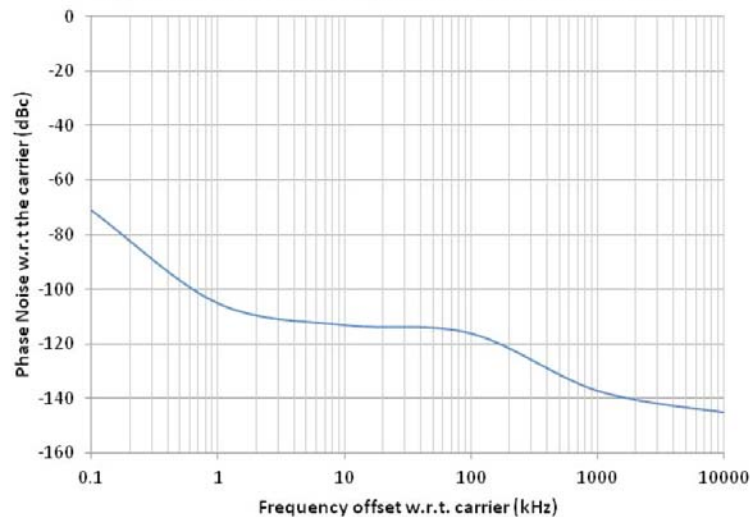
Output connectors		SMA
Output impedance		50Ω
Reference-In connector		SMA
Reference-In impedance		50Ω
DC Voltage in		Feed through pin
Alarm		Feed through pin
Dimension	Width	57 mm
	Height	57 mm
	Depth	22 mm
Weight		<120 gms

Environmental Specification:

Operating temperature 1	-20 to +75°C
Storage temperature	-50 to +85°C
Humidity	95% non-condensing
Shock (survival)	30 g's, 10ms pulse
Vibration (survival)	20 to 2000Hz random to 4 g's rms

¹ Extended temperature ranges available

Typical Phase Noise by PLDRO Series at 10GHz



Part numbering:

PLDRO with Internal Reference

PLDRO-I-A-MMMMM-XXX

DC Supply Voltage (for 5.6V indicate 560)

Output frequency in MHz

Alarms: L : TTL Low in lock, High out of lock
H : TTL High in lock, Low out of lock

Part numbering:

PLDRO with External Reference

PLDRO-E-MMM-A-MMMMM-XXX

DC Supply Voltage (for 5.6V indicate 560)

Output frequency in MHz

Alarms: L : TTL Low in lock, High out of lock
H : TTL High in lock, Low out of lock

External Reference Frequency (MHz)

Data sheet is for information purposes only and may be subject to modifications or may be discontinued without notice. *Rev. 1 dated 02-01-2015*