

### NXPLOS-IX Series PLDRO: Dual Loop External Reference Phase Locked DRO (DLPLDRO) - Typical Specifications

Frequency Range in GHz	0.5 - 2.8	2.8 - 9.0	9.0 - 14.0	14.0 - 16.0	16.5 - 23.0
Minimum Output Power in dBm (over temp)	+12	+12	+11	+10	+8
Frequency Stability (over temp)	Coherent to External Reference				
Power variation in dB (over temp)	< 2.0	< 2.0	< 3.0	< 3.0	< 3.0
Pulling (1.5:1 VSWR)	Will not break lock				
Harmonics in dBc (typ)	-15	-15	-20	-25	-25
Discrete Spurious in dBc (Fo<+/- 300 MHz) (1)	-75	-75	-75	-75	-70
Discrete Spurious in dBc (Fo>+/- 300 MHz) (1)	-65	-65	-65	-65	-65
Spurious plots (in GHz)			11.3		20.7
External Reference Frequency (2)	5 or 10 MHz nominal				
Internal Reference Frequency	Multiples of External Reference or Arbitrary Frequency				
External Reference Input Power	0+/- 3 dBm nominal				
Typical Phase Noise @ 100 Hz offset	-73	-73	-67	-65	-65
@ 1KHz offset	-98	-98	-93	-90	-87
@ 10KHz offset	-112	-112	-97	-102	-99
@ 100KHz offset	-115	-115	-110	-105	-102
@ 1MHz offset	-125	-125	-123	-120	-115
Phase Lock Alarm	Open Collector, locked open, unlocked ground				
Phase Voltage Monitor	1 - 11V				
Operating Temperature (base plate)	0 to +60 deg C (Military temperature range available)				
Power Supply (3)	+12 +/- 3% VDC, 400 mA typ (steady state), 750 mA surge				
RF Connector	SMA Female (Field replaceable option available)				
DC Connector	Solder pin				
Size Length X Width (inches)	2.25 X 2.25				
Size: Height (exclude tuning screw [.25" max]) (inches)	1.48	1.61	1.48	1.48	1.48
Outline: DC200106	Rev. 2H	Rev. 2E	Rev. 2C		
Weight (in ounces):	6.3				
<b>Notes:</b> (1) Lower spurious option (<-90 dBc) available					
(2) Other Reference Frequencies to be specified by customer, contact factory for details					
(3) Other supply voltage available.					
<b>*Please note:</b> Guaranteed phase noise is 5 dB higher than typical. Better phase noise available.					
Phase noise plots (in GHz)			13.2		