

10 MHz Redundant Oscillator

8-28V
External DC powering

850-2150 MHz
Operating frequency range



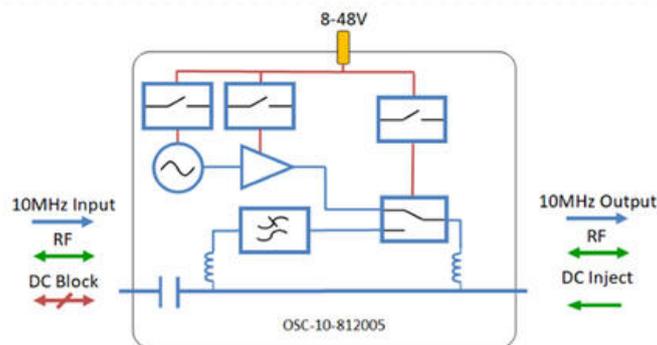
Compact
Housed in rugged compact enclosure

RF Parameters				
		S5S5	N5N5	
Frequency Range		850-2150 MHz		
RF Connectors		50Ω SMA	50Ω N-Type	
Insertion Loss (dB)	Typical	0.5		
	Maximum	1.0		
Flatness ± (dB)		0.25		
Return Loss L-band port (dB)	Typical	16		
	Minimum	10		
Return Loss Multiplexed port (dB)	Typical	15		
	Minimum	10		
Phase Noise Characteristics (dBc/Hz)		10MHz Source Characteristics		
1Hz	<-85	Frequency Setting		10,000,000 ±10 Hz
10Hz	<-115	Output Power Level (dBm)		0, 5, 10 or 15 ±1.5
100Hz	<-140	Output Type		Sinewave
1000Hz	<-150	Harmonic Rejection	2nd	>50 dB
10000Hz	<-155		3rd	>40 dB
			4th	>45 dB
			5th	>60 dB
Oscillator Characteristics				
Frequency Stability				
Over temperature*	< ± 3x10 ⁻⁸ (Warm up time at 25°C < ± 1x10 ⁻⁷ is less than 2 minutes)			
Over time (per year)	< ± 5x10 ⁻⁸			
Short Term Stability (per second)	< ± 1x10 ⁻¹¹			
Load change	< ± 5x10 ⁻⁹			
Stability With Aging				
Per Day	< ± 2x10 ⁻⁹			
Per Year	< ± 5x10 ⁻⁷			

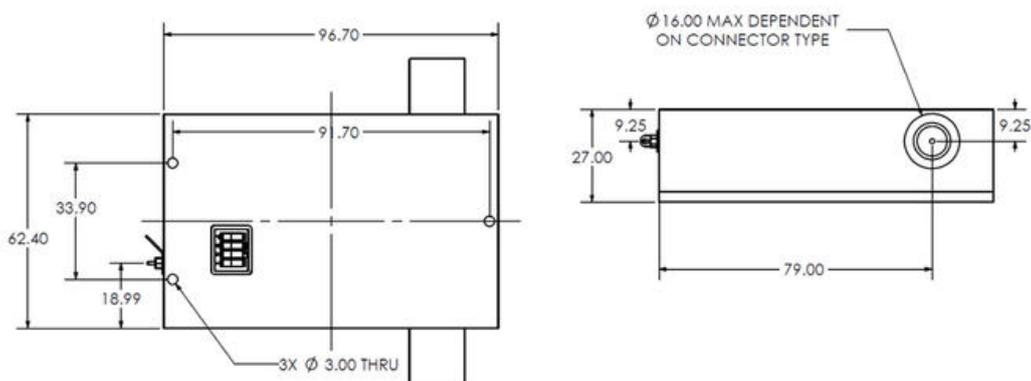
Environmental		Max Operating Parameters	
Operating Temperature	0°C to +55°C	Input RF Power	+36dBm
Storage Temperature	-20°C to +75°C	Input 10MHz Power	+10 dBm
Location	Indoor use Only	DC Inject Current Max	3A
Humidity Max	85% non-condensing	DC Consumption	1A on startup, 400mA Steady State
Altitude Max	10,000 feet		

Switch Functions			
Switch	Function		
	Closed	Open	
SW1	+5 dB Gain	No Gain	
SW2	+10 dB Gain	No Gain	
SW3	10MHz Redundancy ON	10MHz Redundancy OFF (Internal Reference ON)	
SW4	DC Inject ON	DC Inject OFF	

Diagram



Physical Dimensions (mm)



*IP67 integrity is maintained by populating all ports with sufficiently rated connectors and that unused ports have IP67 terminators or dust caps when awaiting connection. Dust caps are not sold with this product.