

## Synthesized Phase Locked Oscillator, 5.3-26.0GHz Internal or External Reference Options, SMA Female RF Output

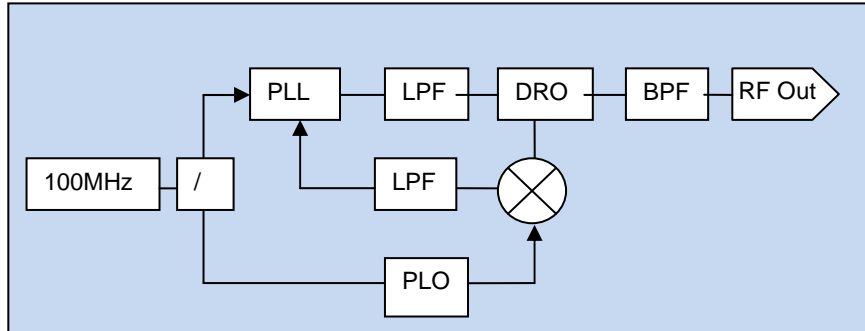
**Specify Single Frequency Between 5.3-26.0GHz**

RSPLO-L101-5.3-26.0-Sf-14d12V-ER100M or ER10M or IR-L1

The Raditek RSPLO family of high performance synthesized single frequency Oscillators offers PLDRO like performance with a non harmonically related reference.

**Units are surprisingly low cost, with very respectable phase noise!**

**Internal reference (IR 1ppm (0.1ppm opt)) / External Reference (ER100M / ER10-90M in 10MHz increments)**



Order as RSPLO-L101-Frequency out(x.x GHz),-Reference IR/ER100M / ER10M)

Output frequency	Typical specifications:-	
<b>9.820 GHz</b>		
<b>10.930 GHz</b>		
Internal Reference	100MHz TCXO	(IR TCXO)
	C/N -150dBc/Hz	1KHz offset
Phase noise	-120dBc/Hz	100Hz offset
	-150dBc/Hz	1KHz offset
	-160dBc/Hz	10KHz offset
SSB Phase noise		
	-80dBc/Hz	100Hz offset
	-100dBc/Hz	1KHz offset
	-105dBc/Hz	10KHz offset
	-115dBc/Hz	100KHz offset
	-140dBc/Hz	1MHz offset
Spurious (non harm.)	-65	dBc
Harmonic	-20	dBc
Frequency stability	±1.0 ppm	-10 to 50°C
RF output power	14 ± 2 dBm	
DC bias	+12V @ 500mA	typical
Alarm	TTL Low	Lock is TTL Hi
Package size	60(L) x55(W) x 27(H) 2.36(L) x 2.16(W) x (H)0631.	mm In

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Typical specifications:-					
Fixed Frequency		5-12.99 GHz (no doubler)	5-12.99 GHz (no doubler)	13-26 GHz (with doubler)	
Model #		-IR5ppm	-ER	-IR5ppm // ER	
Existing Models (Spec Guaranteed)	GHz	9.820, 10.930	9.820, 10.930		
Future models (Spec Typical)					
<b>Internal reference</b>		TCXO		TCXO	
C/N -1KHz offset		150dBc/Hz		150dBc/Hz	
<b>SSB Phase noise</b>					
100Hz offset	dBc/Hz	-80	-80	-72	
1KHz offset	dBc/Hz	-100	-100	-82	
10KHz offset	dBc/Hz	-105	-105	-82	
100KHz offset	dBc/Hz	-115	-115	-100	
1MHz offset	dBc/Hz	-140	-140	-120	
Spurious (non harmonically related.)	dBc	-65	-60	-65	
Harmonics	dBc	-20	-20	-20	
Frequency stability: -10 to 50°C -20 to 70°C	ppm	±1.0 ±5.0	as external reference	±1.0 ±5.0	Opt ± 0.1ppm (height 25mm)
Load VSWR		1:2.0	1:2.0	1:2.0	
RF output power	dBm	14 ±2	14 ±2	14 ±2	
Alarm on PLL Unlock (In band)		TTL Low	TTL Low	TTL Low	Lock is TTL Hi
DC bias		+12V @ 500mA	+12V @ 500mA	+12V @ tba mA	
Package size	mm in	60(L) x55(W) x 27(H) 2.36 x 2.16 x .0631	60(L) x55(W) x 27(H) 2.36 x 2.16 x .0631	60(L) x55(W) x 27(H) 2.36 x 2.16 x .0631	
Part # examples		RSPLO-L101-10.93- 14d12V-IR5-L1	RSPLO-L101-10.00- 14d12V-ER-L1		
Opt: External reference 10MHz	MHz		Level 0±3dbm (height 25mm)	10-90 (in 10M inc) Level 0±3dbm (height 25mm)	
Opt: External reference 100MHz	MHz		Level 0±3dbm	Level 0±3dbm	
Resolution setting	KHz	100	100	100	le 10.1356GHz
Temp Range	°C	-20 to 60C	-20 to 60C		
Connection 12V, Alarm		Filtered feed thru	Filtered feed thru	Filtered feed thru	+ Ground Lug
Opt Ruggedized		ER model	ER model	ER model	IR model if shock mounted

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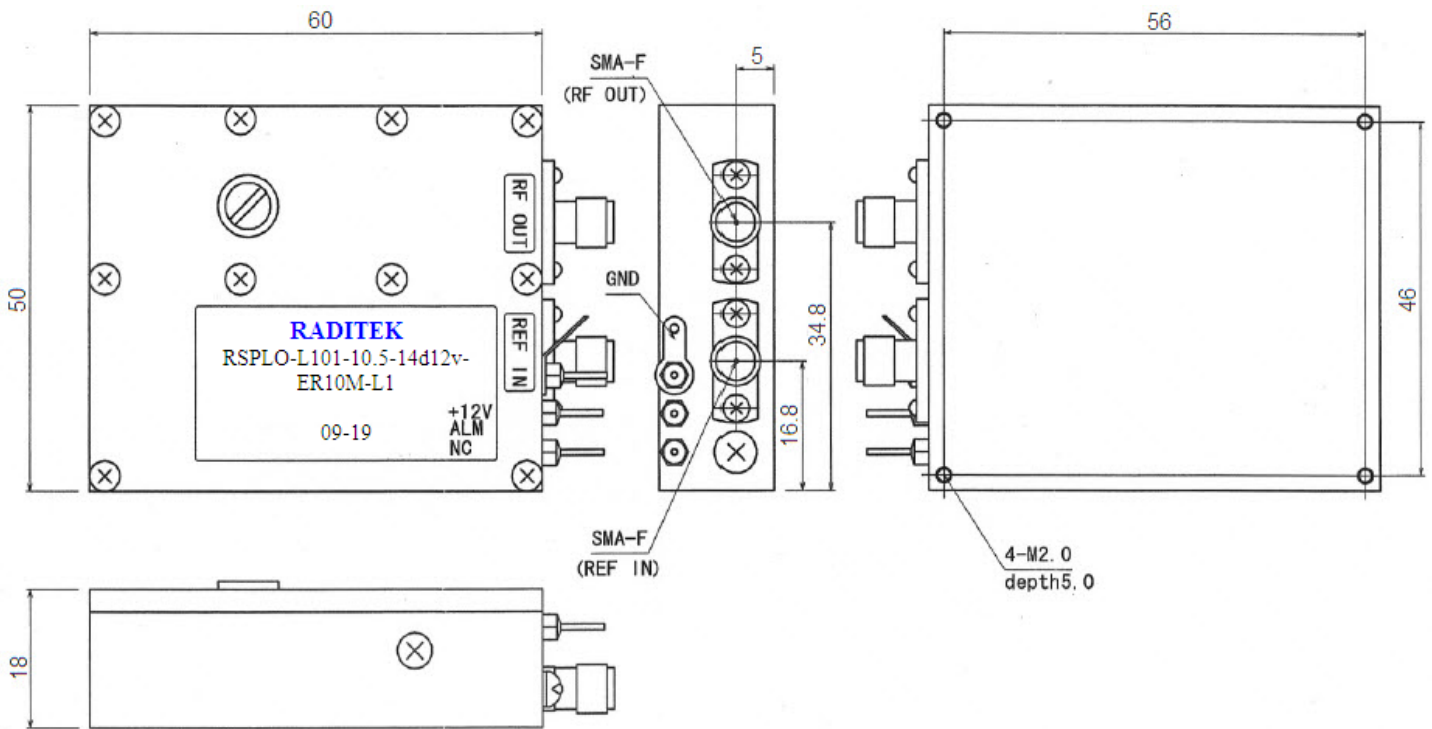
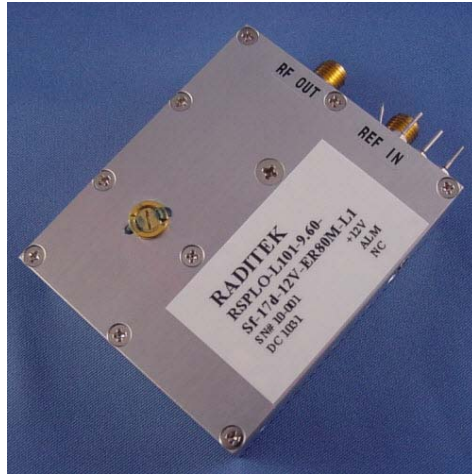
RSPLO-L101-5.3-26.0-Sf-14d12V-ER100M or ER10M or IR-L1

Typical specifications:-				
Fixed Frequency		9.60GHz (no doubler)	9.60GHz (no doubler)	
Model #		-ER-80M	-ER-100M	
Existing Models (Spec Guaranteed)	GHz	9.60	9.60	
<b>Internal reference</b>				
C/N	-1KHz offset			
<b>SSB Phase noise</b>				
	100Hz offset	dBc/Hz	-75	-75
	1KHz offset	dBc/Hz	-95	-95
	10KHz offset	dBc/Hz	-105	-105
	100KHz offset	dBc/Hz	-115	-115
	1MHz offset	dBc/Hz	-140	-140
Spurious (non harmonically related)		dBc	-70	-60
Harmonics		dBc	-20	-20
Frequency stability:	-10 to 50°C -20 to 70°C	ppm	as external reference	as external reference Opt ± 0.1ppm (height 25mm)
Load VSWR			1:2.0	1:2.0
RF output power		dBm	17	17
Alarm on PLL Unlock (In band)			TTL Low	TTL Low Lock is TTL Hi
DC bias			+8V @ 500mA	+12V @ 500mA
Package size	mm in	60(L) x50(W) x 18(H)	60(L) x50(W) x 18(H)	
Resolution setting	KHz		100	100 le 10.1356GHz
Temp Range	°C		-20 to 60C	-20 to 60C
Connection 12V, Alarm			Filtered feed thru	Filtered feed thru + Ground Lug
Part # examples			RSPLO-L101- 10.00-17d8V- ER80M-L1	RSPLO-L101- 10.00-17d12V- ER100M-L1
Opt Ruggedized				
Opt: External reference 10MHz	MHz		Level 0±3dbm (height 25mm)	Level 0±3dbm (height 25mm)
Opt: External reference 100MHz	MHz		Level 0dbm min	Level 0±3dbm
offset			C/N	C/N
100Hz		dBc/Hz	<-120	<-120
1KHz		dBc/Hz	<-140	<-140
10KHz		dBc/Hz	<-160	<-160
100KHz		dBc/Hz	<-160	<-160

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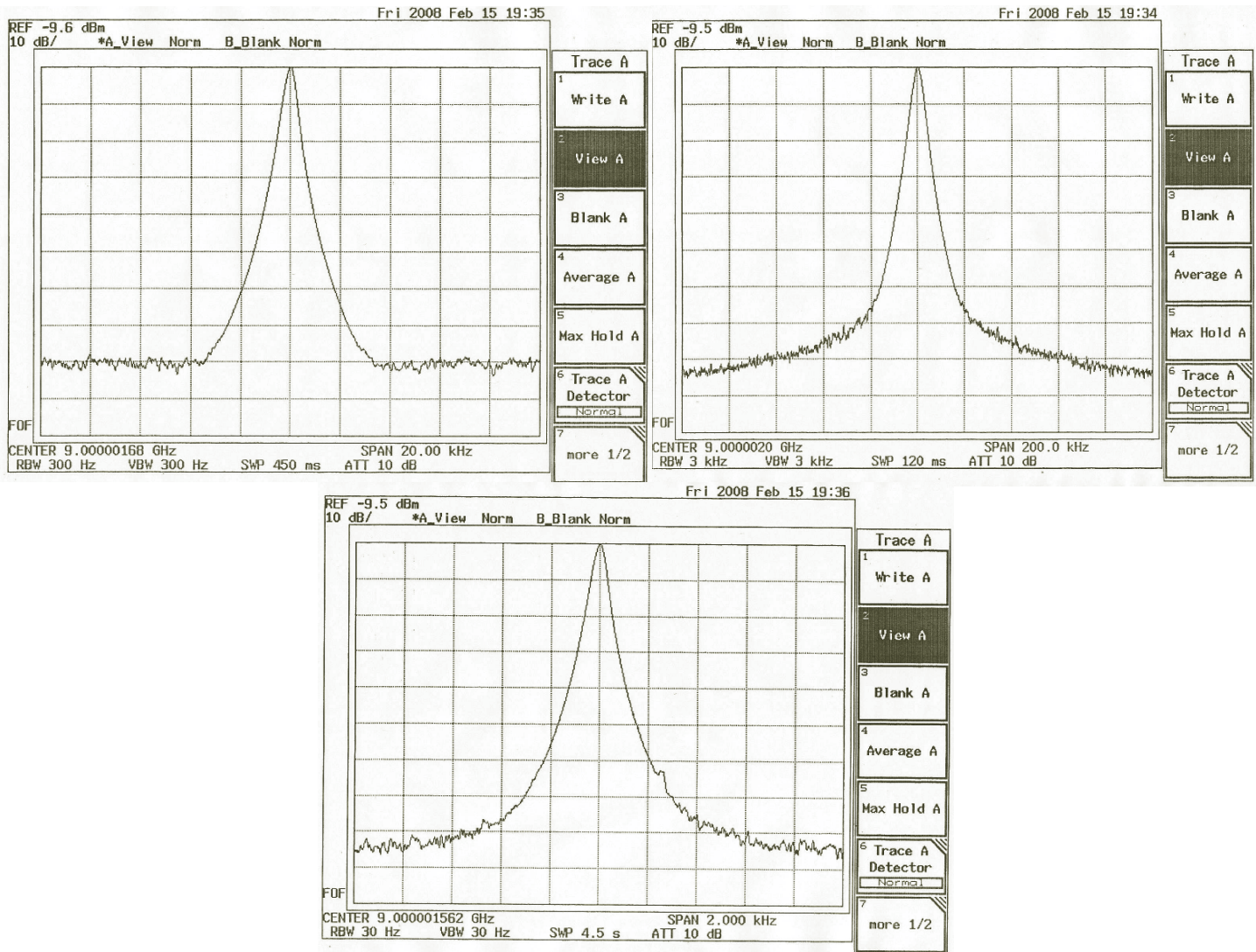
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### High Speed SPST Switch

