

Synthesized Phase Locked Oscillator, 510.29-804.29MHz

code-L1

10MHz External Reference, D-SUB Connector

Specify Single Frequency Between 510.29-804.29MHz

RSPLO-L103-510.29-804.29M-10d12V-ER10M-L1

RSPLO-L103 Series are Phase Locked Crystal Signal Sources with Ultra-Low Phase Noise Levels (-130dBc/Hz at 1 KHz offset) which has been developed for SFN (Single Frequency Networks) and MFN (Multi Frequency Networks), Transmitter Stations of Digital TV Broadcasting. The signal sources can be phase locked with external reference such as Rubidium Frequency Standard as normal operation; however the unit can be still operated to keep high frequency stability and extremely low phase noise when an external reference is lost. These high performance specs have been achieved by our unique DDS technologies and 100MHz Band SC-cut VCOCXO, which has been recently developed.

Features:

- Extremely Low Phase Noise (100MHz Band SC-cut VCOCXO): 130 dBc/Hz at 1KHz offset
- High Frequency Stability Phase Locked Mode :Same as Ext. Ref
Free Running Mode :Less Than ± 1 PPM ($-20 \sim +60^{\circ}\text{C}$)
- Compact & plug in Package for TV channels ,13 to 62



Specify any Single Frequency between 510.29MHz and 804.29MHz

Order Examples: RSPLO-L103-1020M-10d12V-ER10M-L1

Description: (Synthesized Phase Lock Oscillator, L103 Model, 1020MHz 10 dBm RF Power, 12 Volts DC, 10MHz External Reference)

Specifications		Units
Frequency Range :	510.29~804.29	MHz
	(Specified frequency CH13~CH63)	
Frequency Accuracy	≤ 1	MHz
RF Output Power	$\geq +10$	dBm
SSB Phase Noise	≤ -60	dBc (Integrated 10Hz ~ 1MHz)
• 10Hz offset	≤ -80	dBc/Hz
• 100Hz offset	≤ -100	dBc/Hz
• 1 KHz offset :	≤ -130	dBc/Hz
• 10 KHz offset :	≤ -138	dBc/Hz
• 100 KHz offset :	≤ -140	dBc/Hz
Spurious Level		
• Harmonics	≤ -20	dBc
• Non-Harmonics	≤ -60	dBc
Frequency Stability:		
• Phase Locked Mode	Same as External Reference In	
• Free Running Mode	$\leq \pm 1$	ppm @ $-20 \sim +60^{\circ}\text{C}$

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Specifications may be subject to change

08/14/08

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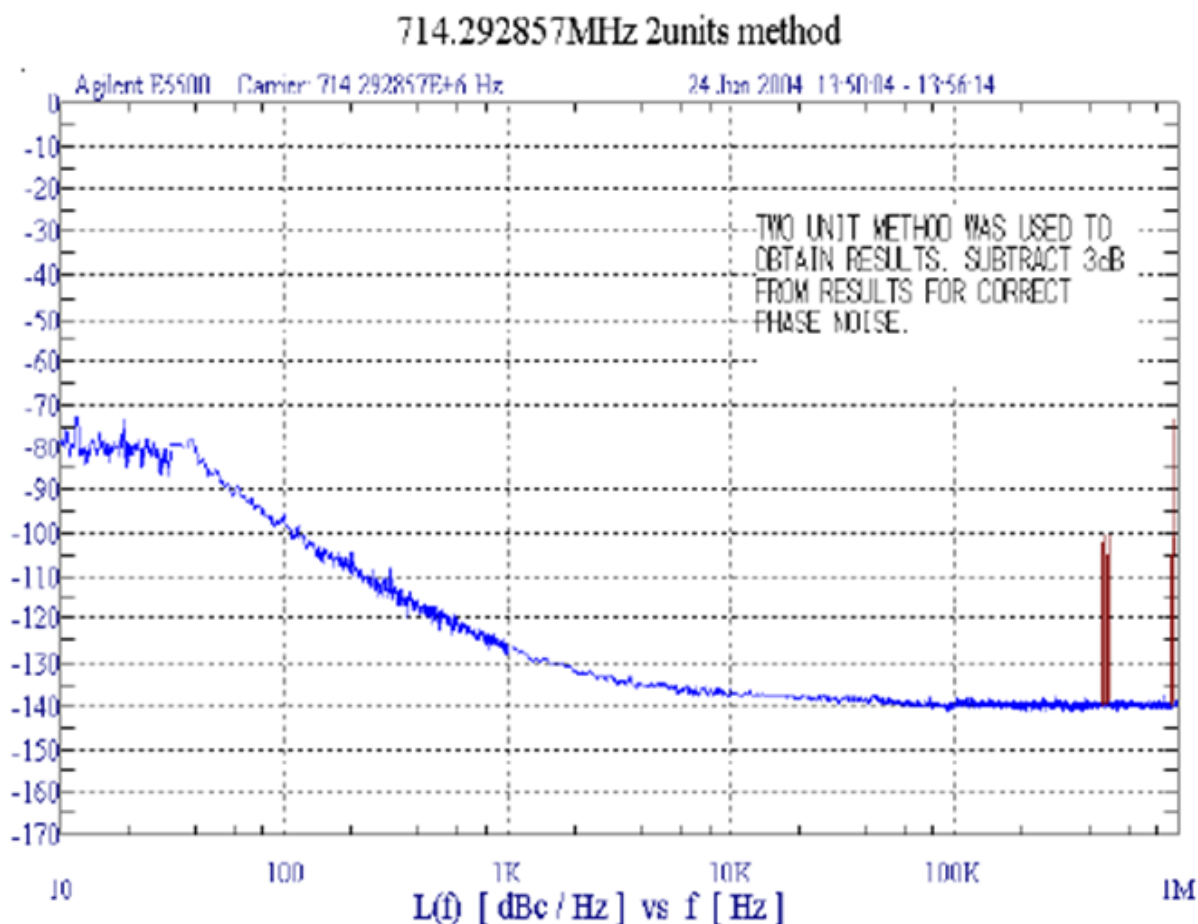
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Specifications		Units
External Reference. In.	10	MHz, -20 ~ 0dBm
Alarm Out		
• Lock	TTL-Hi	
• Un-Lock :	TTL-Lo	
Re-set	Hi to Lo Active	
DC Bias	500	mA (max) @ +12V
Operating Temp. Range	-20 ~ +60	°C
Dimensions	40W x 122L x 20H	mm
Connectors	D-SUB	



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