



## Coaxial Resonator VCO MCR898-924DB Side A DB Package

Performance Specification	Min	Typ	Max	Units
Frequency Range	899	-	915	MHz
Tuning Voltage	0.5	-	4.5	Vdc
Vcc	4.5	5.5	5	Vdc
Icc	-	22	23	mA
Output Power	1	+2	+2.5	dBm
2nd Harmonic	-	-17	-15	dBc
Pushing	-	0.3	0.4	MHz/V
Pulling P-P 14dB Rtn Loss	-	0.1	0.3	MHz
Tuning Port Capacitance	-	100	-	pF
Load Impedance	-	50	-	Ohms
Phase Noise @ 1KHz Offset	-	-94	-92	dBc/Hz
Phase Noise @ 10KHz Offset	-	-120	-118	dBc/Hz
Phase Noise @ 100KHz Offset	-	-139	-136	dBc/Hz
Tuning Sensitivity (Kvco)	3	-	7	MHz/V
Frequency Drift @ -40 C	-	-	+1	MHz
Frequency Drift @ +85 C	-	-	-0.8	MHz
Power vs Temp @ -40 C	-	-	-1.2	dBm
Power vs Temp @ +85 C	-	-	+0.5	dBm
Operating Temperature	-40	-	+85	C
Storage Temperature	-55	-	+125	C
Package Style		DB		



806 Packer Way, Sparks NV, 89431  
Voice: 775-331-2442 Fax: 775-331-6266

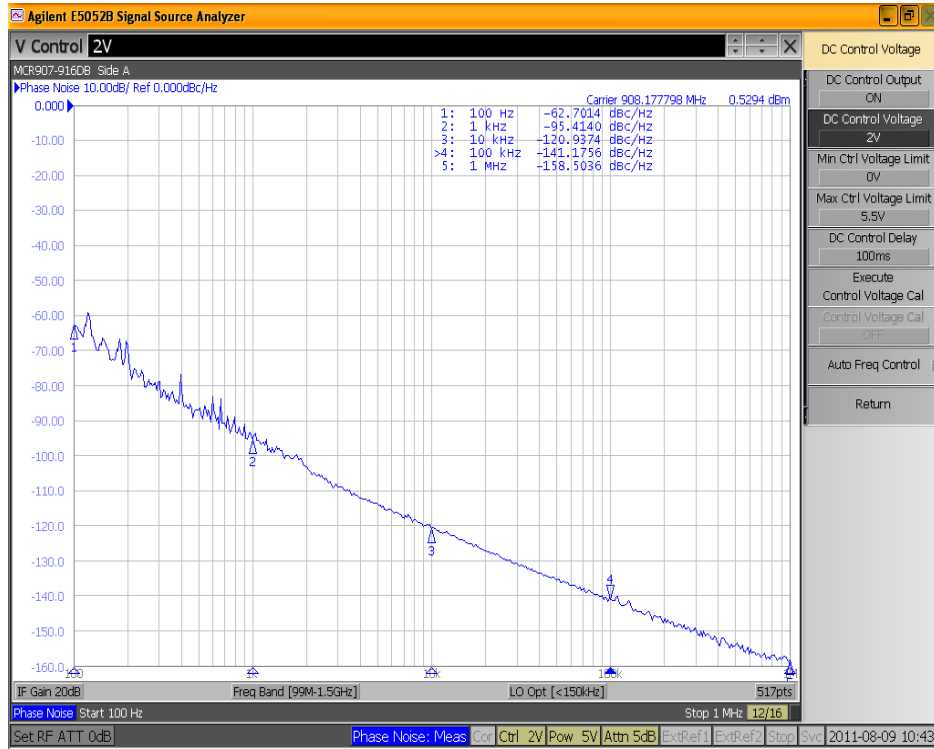
Toll Free 800-672-4552 www.modcoinc.com sales@modcoinc.com

**Modco**  
**Inc**

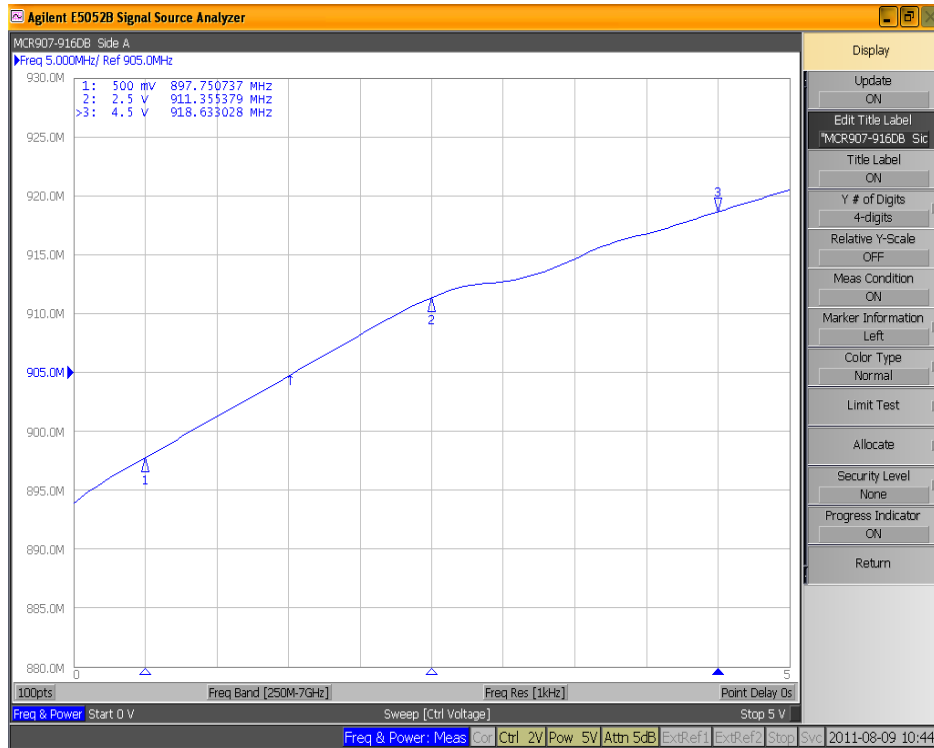


# MCR898-924DB

## Phase Noise (1 Hz Bandwidth Typ) Side A



## Frequency vs Tuning Voltage Side A





## Coaxial Resonator VCO MCR898-924DB Side B DB Package

Performance Specification	Min	Typ	Max	Units
Frequency Range	908	-	924	MHz
Tuning Voltage	0.5	-	4.5	Vdc
Vcc	4.5	5	5.5	Vdc
Icc	-	22	23	mA
Output Power	1	+2	+3	dBm
2nd Harmonic	-	-17	-15	dBc
Pushing	-	0.4	0.5	MHz/V
Pulling P-P 14dB Rtn Loss	-	0.1	0.3	MHz
Tuning Port Capacitance	-	100	-	pF
Load Impedance	-	50	-	Ohms
Phase Noise @ 1KHz Offset	-	-93	-90	dBc/Hz
Phase Noise @ 10KHz Offset	-	-120	-118	dBc/Hz
Phase Noise @ 100KHz Offset	-	-134	-132	dBc/Hz
Tuning Sensitivity (Kvco)	4	-	6	MHz/V
Frequency Drift @ -40 C	-	-	+1.1	MHz
Frequency Drift @ +85 C	-	-	-0.9	MHz
Power vs Temp @ -40 C	-	-	-1.2	dBm
Power vs Temp @ +85 C	-	-	+0.6	dBm
Operating Temperature	-40	-	+85	C
Storage Temperature	-55	-	+125	C
Package Style		DB		



806 Packer Way, Sparks NV, 89431  
Voice: 775-331-2442 Fax: 775-331-6266

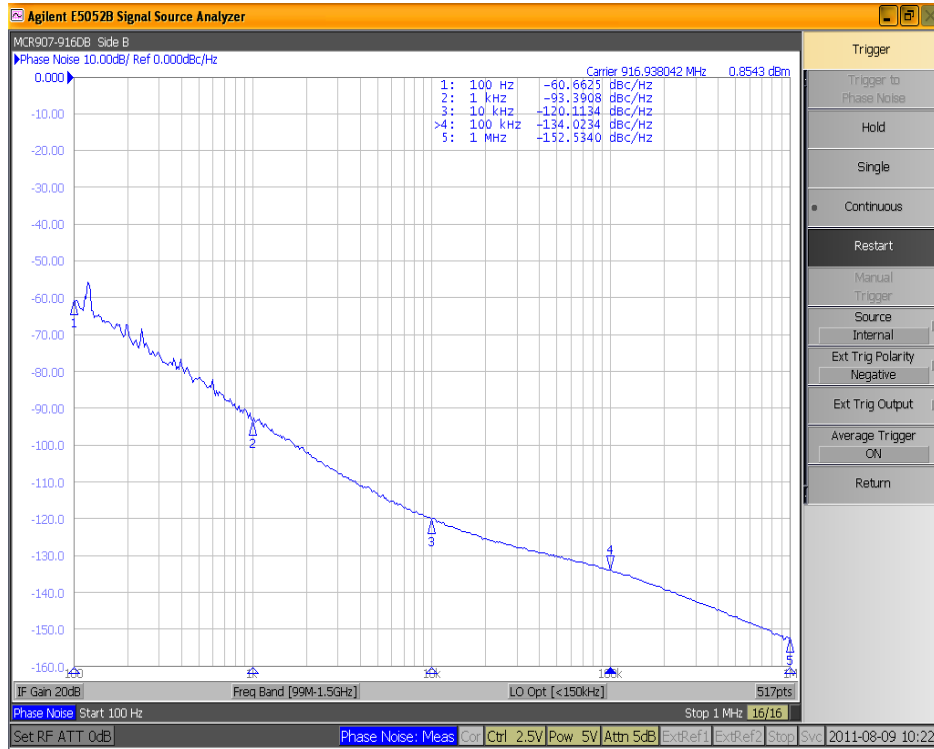
Toll Free 800-672-4552 www.modcoinc.com sales@modcoinc.com

**Modco**  
**Inc**

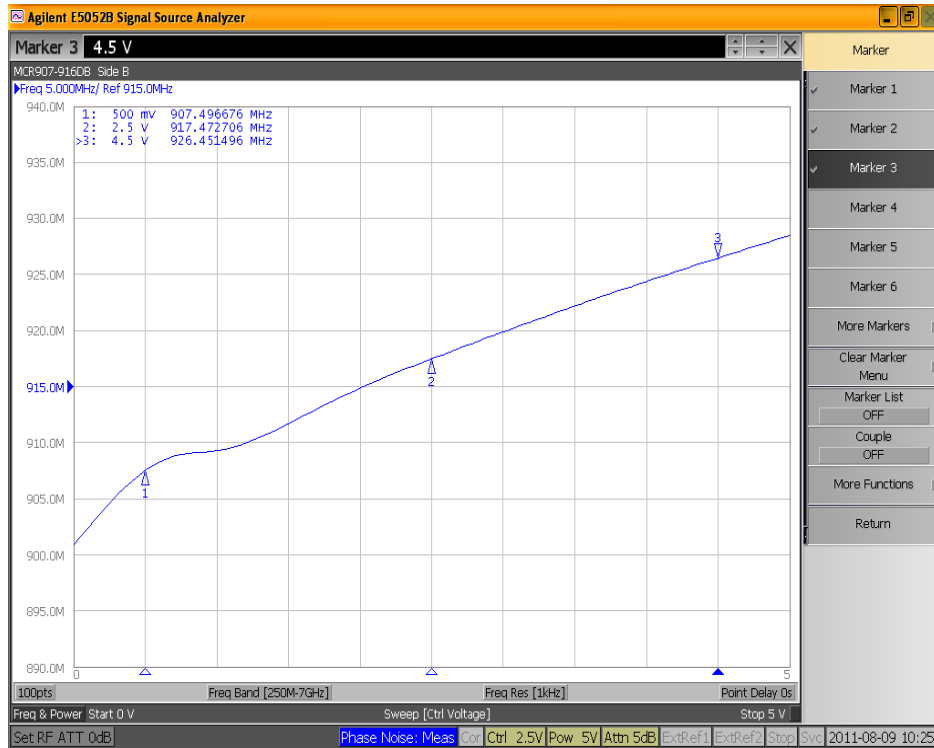


# MCR898-924DB

## Phase Noise (1 Hz Bandwidth Typ) Side B



## Frequency vs Tuning Voltage Side B



# DB Package dimensions (Units; inches (mm))

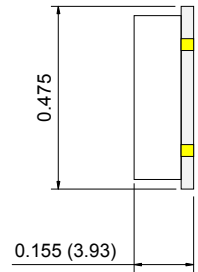
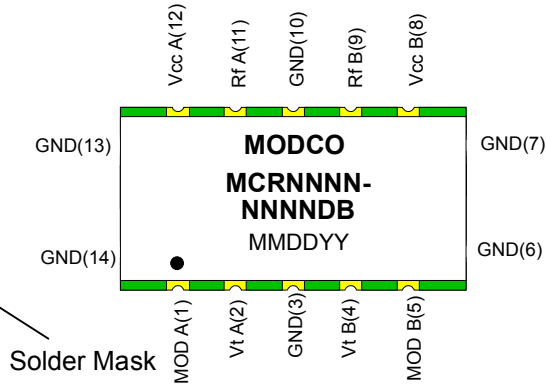
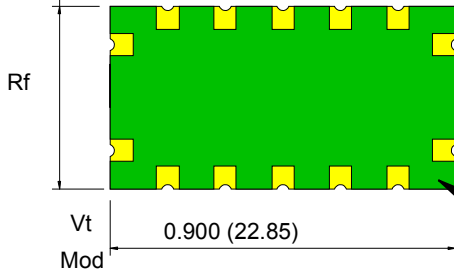


## BOTTOM VIEW

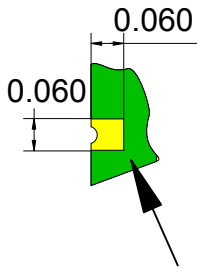
## TOP VIEW

## SIDE VIEW

0.475 (12.07)



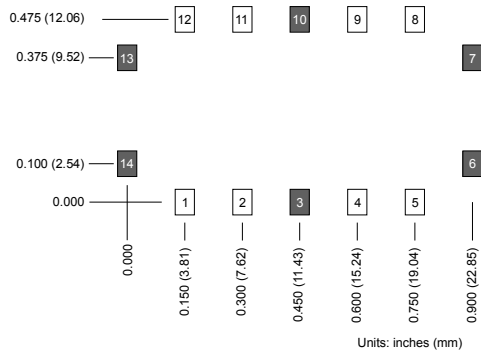
## PAD DETAIL



Solder Mask

## PCB Pad Layout

Pin	Con.
1	ModA
2	VtA
4	VtB
5	ModB
8	VccB
9	RfB
11	RfA
12	VccA
Others	GND



### Notes:

1. The case is ground.
2. Unless otherwise specified all dimensions are in inches.
3. Unless otherwise specified finish is 150-200 micro inches nickel over copper clad PCB, 5-15 micro inches malleable, 99.99% pure gold, over nickel

## Part labeling

Part number: AA=Alpha pre-fix, product family or custom part designator.  
 NNNN-NNNN=Numeric, frequency range  
 Part type: 2 to 4 alpha part type designator  
 Date code: MM=month, DD=day, YY=year  
 Label material is high temp. polyester film, opaque white, with black marking.

