

ROS-740PV+



- low phase noise, -106 dBc/Hz at 10 kHz offset, typ.
- linear tuning, 8-14 MHz/V typ.
- 5V power supply
- aqueous washable
- protected by US patent 6,424,241

- PLL circuitry
- UHF
- communication systems

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

FREQUENCY (MHz)		POWER OUTPUT (dBm)	TUNING VOLTAGE (V)		PHASE NOISE (dBc/Hz)				PULLING pk-pk @ 12 dBr (MHz)	PUSHING (MHz/V)	TUNING SENSITIVITY (MHz/V)	HARMONICS (dBc)		3 dB MODULATION BANDWIDTH (MHz)	DC OPERATING POWER	
					SSB at offset frequencies: Typ.										Voltage (V)	Current (mA)
Min.	Max.	Typ.	Min.	Max.	1 kHz	10 kHz	100 kHz	1 MHz	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Voltage (V)	Current (mA)
720	740	0	0.5	5.0	-84	-106	-126	-145	1.0	0.8	10-14	-16	-10	5.0	5	15

RF OUT	10
VCC	14
V-TUNE	2
GROUND	1,3,4,5,6,7,8,9,11,12,13,15,16

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+6V
Absolute Max. Tuning Voltage (Vtune)	+6V

all specifications: 50 ohm system
Permanent damage may occur if any of these limits are exceeded.

PCB Land Pattern

Suggested Layout,
Tolerance to be within $\pm.002$

Legend:
 METALLIZATION
 SOLDER RESIST

- NOTES: 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .030" $\pm$.002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

 DENOTES PCB COPPER LAYOUT WITH SMOBC
 (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

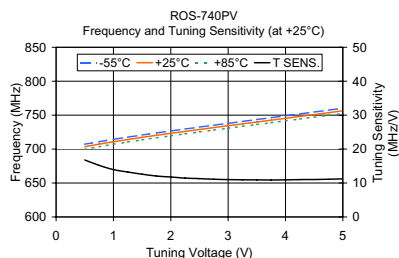
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt.
.500	.500	.180	.100	.080	.115	.060	.040	.540	.060	.100	.135	.135	.115	.140	.070	.150	.070	grams
12.70	12.70	4.57	2.54	2.03	2.92	1.52	1.02	13.72	1.52	2.54	3.43	3.43	2.92	3.56	1.78	3.81	1.78	1.0

Notes:

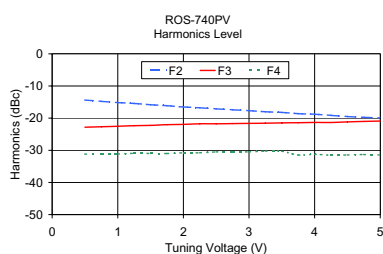
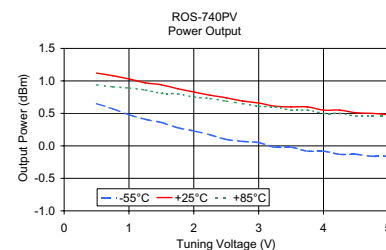
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Performance Data & Curves

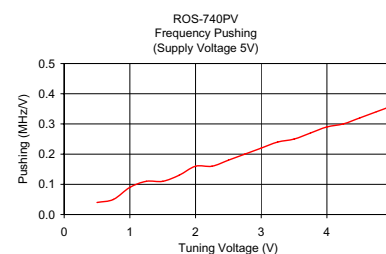
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V TUNE	TUNING SENS. (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)		
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C
0.50	16.80	707.20	703.51	699.64	0.65	1.12	0.94
0.75	15.20	710.89	707.31	703.55	0.57	1.08	0.91
1.00	13.96	714.33	710.80	707.12	0.48	1.03	0.89
1.25	13.24	717.60	714.11	710.48	0.41	0.97	0.86
1.50	12.60	720.74	717.26	713.65	0.36	0.94	0.81
1.75	12.06	723.76	720.28	716.69	0.28	0.88	0.80
2.00	11.77	726.71	723.22	719.64	0.23	0.83	0.75
2.25	11.45	729.58	726.08	722.50	0.17	0.78	0.73
2.50	11.30	732.42	728.90	725.31	0.10	0.74	0.69
2.75	11.12	735.22	731.68	728.08	0.07	0.69	0.65
3.00	11.01	738.01	734.44	730.81	0.05	0.66	0.61
3.25	10.94	740.77	737.17	733.53	-0.02	0.61	0.60
3.50	10.92	743.53	739.90	736.23	-0.02	0.60	0.55
3.75	10.89	746.29	742.62	738.93	-0.08	0.60	0.55
4.00	10.92	749.05	745.35	741.63	-0.08	0.55	0.50
4.25	11.00	751.84	748.10	744.36	-0.13	0.55	0.50
4.50	11.03	754.63	750.86	747.09	-0.13	0.51	0.46
4.75	11.11	757.44	753.64	749.84	-0.16	0.50	0.46
5.00	11.21	760.29	756.44	752.61	-0.16	0.48	0.46



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
0.50	-14.35	-22.83	-31.18	0.04
0.75	-14.78	-22.67	-31.12	0.05
1.00	-15.16	-22.53	-31.14	0.09
1.25	-15.42	-22.33	-30.93	0.11
1.50	-15.82	-22.26	-30.98	0.11
1.75	-16.11	-22.03	-30.99	0.13
2.00	-16.52	-21.95	-30.77	0.16
2.25	-16.77	-21.75	-30.76	0.16
2.50	-17.10	-21.76	-30.50	0.18
2.75	-17.40	-21.68	-30.46	0.20
3.00	-17.67	-21.63	-30.47	0.22
3.25	-18.00	-21.57	-30.23	0.24
3.50	-18.20	-21.48	-30.29	0.25
3.75	-18.58	-21.42	-31.46	0.27
4.00	-18.77	-21.33	-31.24	0.29
4.25	-19.13	-21.35	-31.52	0.30
4.50	-19.48	-21.17	-31.43	0.32
4.75	-19.73	-21.02	-31.30	0.34
5.00	-19.91	-20.92	-31.43	0.36



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