MVCO Series
Narrow band SMT VCO

Features
- Low phase noise
- Frequency range 25-6000MHz
- Linear tuning
- Standard SMT package
- 50W Impedance
- RoHS compliant

Applications
- CDMA，WCDMA，TD-SCDMA Base stations
- CDMA，WCDMA，TD-SCDMA Repeaters
- GSM，EDGE wireless base stations
- Point to point radio

To order

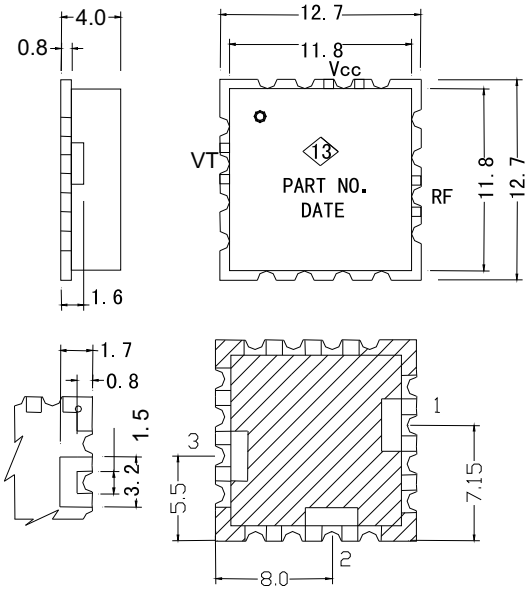
MVCO 1050
① ②

①：Series name, SMT VCO

②：Centre frequency

Package

Outline drawing



Pin functions

Pin No .	Function
1	Output RF
2	Power supplyVcc
3	Tuning port V_T
Others are ground	

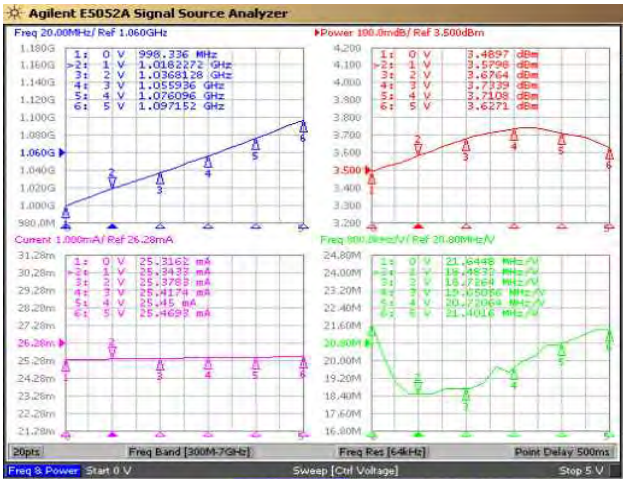
Absolute Maximum Rating

Parameter	Absolute limit
Supply voltage V_{CC}	+6.5V
Min tuning voltage V	0.7V
Max tuning voltage V	+8.0V
Max reflowing temp (10S)	+230℃
Storage Temperature	-45℃~+100℃

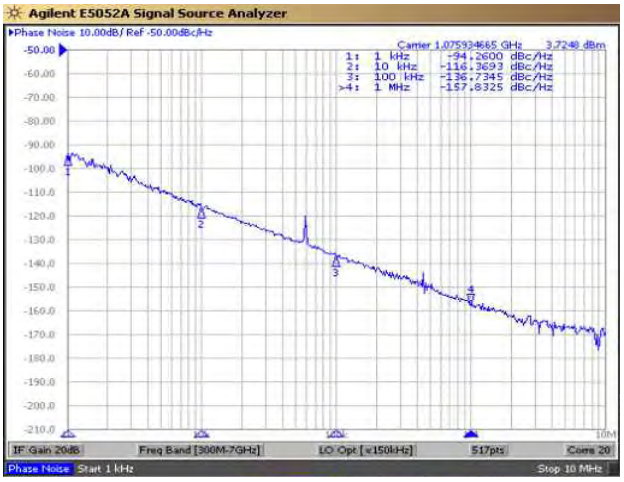
Notes 1. Operation of device above any one of these parameters may cause permanent damage
2. Electrostatic sensitive device

Part number	Frequency range f(MHz)	Output power Po (dBm)	Tuning voltage VT(V)	Tuning sensitivity (MHz/V)	Harmonic (dB) Typ	Phase noise Sj(dBc/Hz) fm=10KHz Typ	Phase noise Sj(dBc/Hz) fm=1MHz Typ	Tuning port capacitance Cp(pF) Typ	Power supply Vcc (V)	Current Icc(mA) max
MVCO070	67—73	0±2	0.5—4.5	3	-10	-120	-162	400	5	15
MVCO150	140—160	0±2	0.5—4.5	6	-12	-118	-162	400	5	15
MVCO190	185—195	0±2	0—5	3	-17	-118	-162	400	5	15
MVCO233	223—243	0±2	0.5—4.5	6	-16	-115	-160	250	3	15
MVCO348	305—392	8±2	0—5	20	-10	-100	-145	200	5	15
MVCO385	360—410	3±3	0.5—4.5	14	-15	-113	-153	200	5	15
MVCO385W	360—410	3±3	0.5—4.5	14	-15	-110	-150	200	5	15
MVCO395A	385—405	0±2	0.5—4.5	9	-10	-118	-156	330	5	13
MVCO460	450—470	4±2	0.5—3.0	13	-16	-110	-150	100	3.3	13
MVCO500D	485—515	0±2	0.5—4.5	13.5	-25	-117	-155	51	5	15
MVCO600D	585—615	0±2	0.5—4.5	12.5	-25	-116	-155	51	5	15
MVCO700D	680—720	0±2	0.5—4.5	15	-25	-116	-155	51	5	20
MVCO760	740—780	0±2	0.5—4.5	12	-15	-113	-155	50	5	15
MVCO825A	780—844	0±2	0.5—4.5	23	-25	-113	-153	51	5	25
MVCO830	810—850	0±2	0.5—4.5	12	-15	-110	-151	50	5	15
MVCO940	920—960	0±2	0.5—4.5	12	-15	-110	-150	50	5	15
MVCO944	921—967	0±2	0.5—4.5	26	-25	-110	-150	51	5	25
MVCO1000D	980—1020	0±2	0.5—4.5	15	-20	-113	-151	51	5	15
MVCO1050	1030—1070	3±2	0.5—4.5	20	-25	-115	-155	51	5	30
MVCO1100D	1080—1120	0±2	0.5—4.5	15	-20	-112	-151	51	5	25
MVCO1200D	1180—1220	0±2	0.5—4.5	18	-25	-112	-151	51	5	25
MVCO1250	1200—1300	0±2	0.5—4.5	30	-15	-105	-145	40	5	15
MVCO1300D	1280—1320	0±2	0.5—4.5	20	-25	-110	-149	51	5	25
MVCO1500	1450—1550	0±2	0.5—4.5	32	-20	-102	-142	40	5	15
MVCO1556	1511—1586	3±2	1.8—4.5	47	-13	-105	-145	51	5	30
MVCO1600	1550—1650	0±2	0.5—4.5	32	-25	-100	-140	40	5	15
MVCO1632	1594—1669	3±2	1.8—4.5	45	-13	-105	-145	51	5	30
MVCO1660	1630—1690	0±2	0.5—4.5	32	-25	-100	-140	30	3.3	15
MVCO1749	1719—1779	3±2	1.8—4.5	39	-13	-107	-147	51	5	30
MVCO1850	1800—1900	0±2	0.5—4.5	32	-25	-100	-140	30	5	15
MVCO1880	1830—1930	3±2	0.5—4.5	39	-15	-105	-145	51	5	35
MVCO1960C	1930—1990	3±2	1.8—4.5	42	-13	-105	-145	51	5	30
MVCO2000A	1867—2131	0±2	0—5	85	-18	-100	-140	20	5	20
MVCO2050	2030—2070	0±1.5	0—3.3	30	-30	-95	-138	20	3	12
MVCO2100	2060—2140	0±2	0.5—4.5	24	-13	-105	-140	25	5	15
MVCO2150	2100—2200	0±2	0.5—4.5	33	-30	-98	-140	25	5	15
MVCO2250	2200—2300	0±3	0.5—4.5	35	-30	-98	-140	25	5	15
MVCO2350	2300—2400	0±2	0.5—4.5	35	-30	-95	-136	25	5	15
MVCO2425W	2360—2480	0±2	0—5	43	-20	-105	-145	50	5	25
MVCO2600W	2530—2670	0±2	0—5	49	-25	-104	-144	50	5	25
MVCO2600	2400—2600	6±2	0.5—4.5	60	-30	-100	-140	20	12	30
MVCO2700	2640—2760	0±2	0—5	36	-15	-103	-143	51	5	30
MVCO3000	2900—3150	0±3	0.5—4.5	80	-25	-95	-135	20	5	25
MVCO3070	3010—3130	0±2	0—5	36	-15	-102	-142	51	5	30
MVCO3180	3080—3280	3±2	0—5	60	-20	-95	-135	20	5	30
MVCO3850	3800—3900	3±2	0—5	38	-20	-95	-135	20	8	30
MVCO4650	4450—4550	0±3	0—5	45	-20	-88	-132	20	8	30
MVCO5200	5080—5160	0±3	0—5	30	-20	-88	-132	20	8	30
MVCO6090	6000—6180	2±2	0—5	65	-20	-86	-130	20	8	30

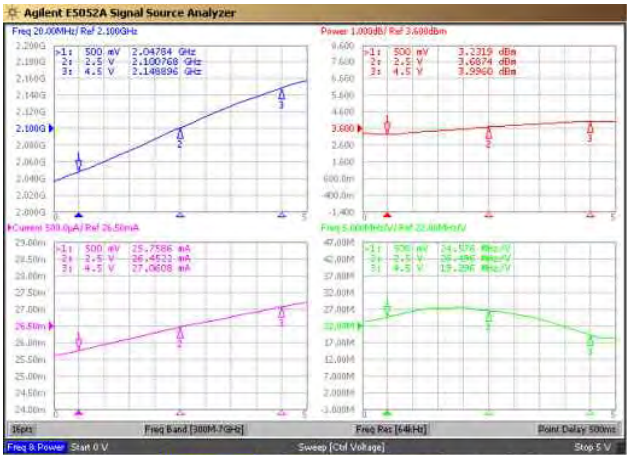
Typical performance (Measured by Agilent E5052A)



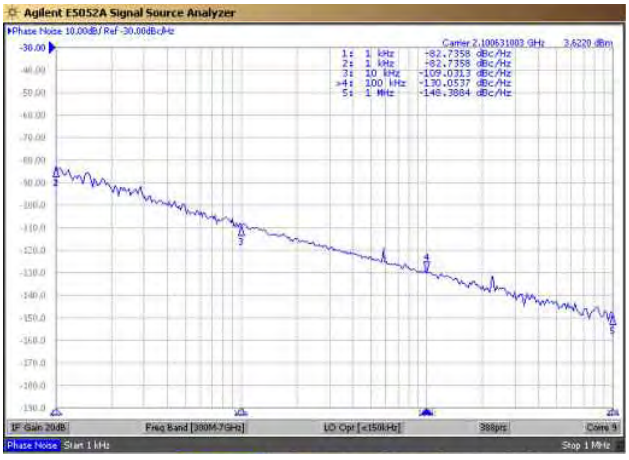
MVCO 1050 Frequency , tuning sensitivity
Output power and current vs. Tuning voltage



Phase noise of MVCO1050



MVCO2100 Frequency, tuning sensitivity
Output power and current vs. Tuning voltage

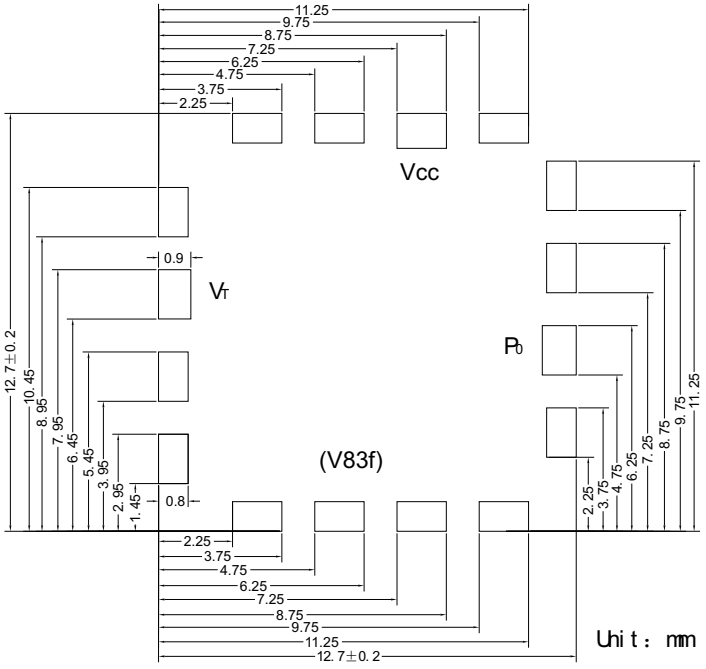


Phase noise of MVCO2100

Notes：

1. Custom design available, frequency cover ***25～6000MHz***，relative bandwidth ***5~30***%。
2. Operating temperature range -20℃~＋70℃，（-40℃~＋85℃ Available ）。
3. SMT package, 12.7×12.7×4.0mm^3

PCB land pattern



Recommend reflow profile