

Features

- Broad frequency range
- Frequency range 25–6000MHz
- SMT package
- 50W Impedance
- Lead free, ROHS compliant



Application

WIMAX, point to point radio, digital TV wireless telecommunication

To order

MVCO 1050 W

① ② ③

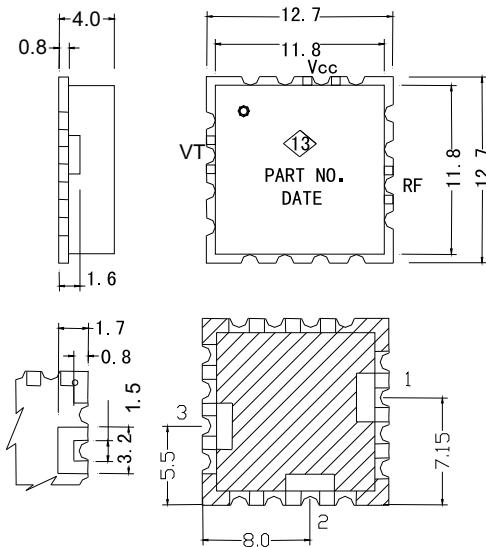
①: Series name, SMT VCO

②: Centre frequency

③: Wider frequency range

Package

Outline drawing



Pin function

Pin No.	Function
1	Output RF
2	Power supply V _{CC}
3	Tuning port V _T
Others are ground	

Absolute maximum ratings

Parameter	Absolute limit
Supply voltage V _{CC}	V _{CC} +1.5V
Min tuning voltage V _T	-0.7V
Max tuning voltage V _T	V _T +3.0V
Max reflowing temp (10S)	+230°C
Storage temperature	-45°C~+100°C

- Note :**
- 1.Operation of device above any one of these parameters may cause permanent damage
 - 2.ESD sensitive, observe handling precaution

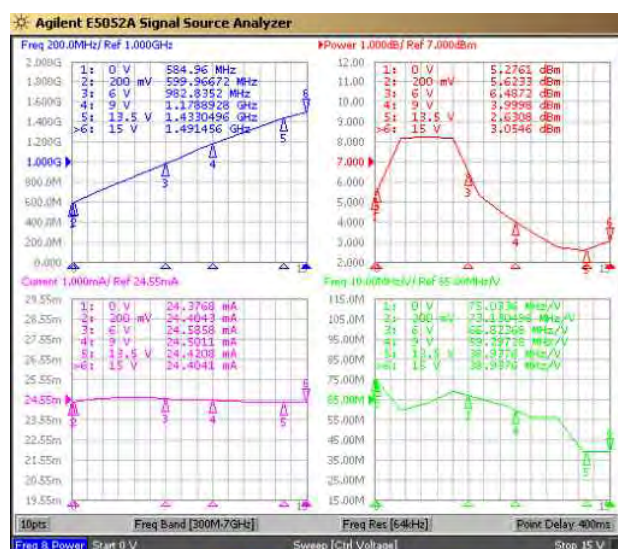
MVCO series broadband VCO



Part number	Frequency f(MHz)	Output power Po (dBm)	Tuning voltage VT (V)	Tuning sensitivity (MHz/V)	Harm (dB) Typ	Phase noise Sj (dBc/Hz) fm = 10KHz Typ	Phase noise Sj (dBc/Hz) fm = 1MHz Typ	Input capacitance Cp(pF) Typ	Supply voltage Vcc (V)	Supply current Icc (mA) max
MVCO038W	25 - 50	6 ± 3	0-12	3	-12	- 125	- 162	1000	5	15
MVCO075W	50 - 100	6 ± 3	0-12	5	-12	- 120	- 160	1000	5	15
MVCO150W	100 - 200	6 ± 3	0-15	8	-12	- 116	- 156	1000	5	15
MVCO200	170 - 238	1 ± 2	1-12	10.5	-17	- 110	- 150	400	5	15
MVCO300W	150 - 450	3 ± 3	0-20	20	-8	- 108	- 148	330	5	35
MVCO450W	300 - 600	3 ± 3	0-15	45	-8	- 100	- 140	150	5	25
MVCO600	400 - 800	7 ± 3	0.5 - 15	35	-10	- 100	- 140	50	8	30
MVCO950B*	700 - 1400	7 ± 3	0-15	75	-8	- 98	- 138	51	12	30
MVCO1100	900 - 1300	3 ± 2	0.5-12	45	-15	- 100	- 140	60	5	25
MVCO1050	900 - 1200	2 ± 2	0.5-4.5	100	-15	- 100	- 140	60	5	25
MVCO1500W*	1000 - 2000	3 ± 3	0-15	75	-8	- 98	- 138	51	12	30
MVCO1540	1040 - 1540	7 ± 3	0.5 - 20	28	-13	- 100	- 140	60	12	30
MVCO1870	1450 - 1870	6 ± 2	0.5 - 20	23	-15	- 100	- 140	60	12	30
MVCO4350	3600 - 5100	4 ± 3	0-20	90	-10	- 80	- 126	51	12	30

* Operating temp range 0°C~+50°C

Typical performance : (Measured by Agilent E5052A)



MVCO950W Frequency, tuning sensitivity
Output power, current vs. Tuning voltage

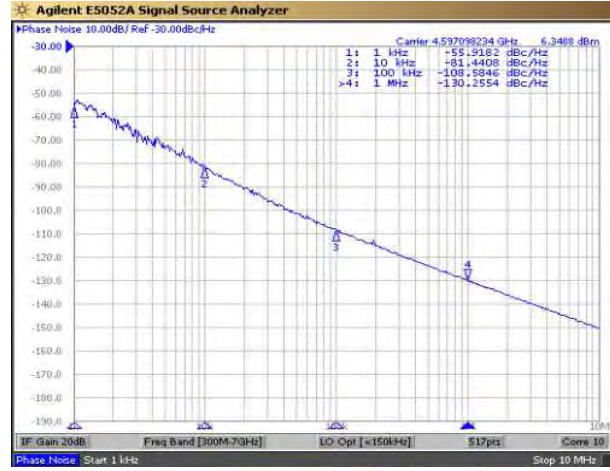
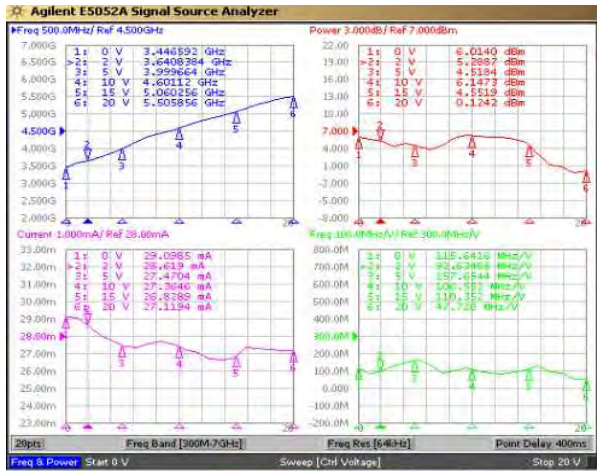


MVCO950BW Phase noise

MVCO Series broadband VCO



Typical performance



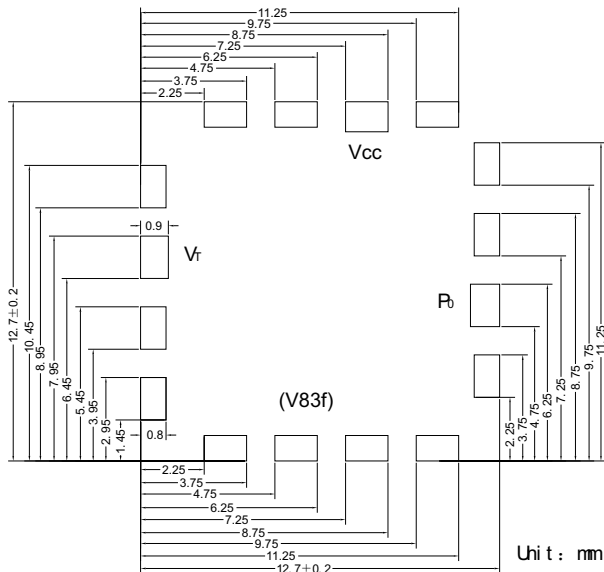
MVCO4350 Frequency, tuning sensitivity
Output power and current vs. Tuning voltage

MVCO4350 Phase noise

Notes:

1. Custom design available, frequency cover **25~5000MHz**, octave bandwidth available
2. Operating temperature range: 20°C~+70°C, (-40°C~+85°C Available).
3. SMT package 12.7×12.7×4.0mm³.

PCB land pattern



Recommend reflow profile

