

ULTRA LOW PHASE NOISE OCXO

MODEL: SOXO13BF100MCSGU

FEATURES

Ultra Low Phase Noise (-168dBc/Hz@1kHz)

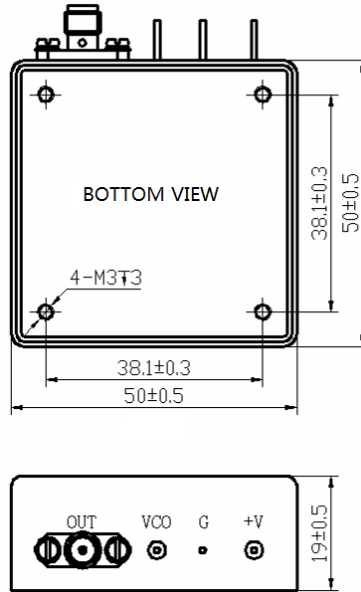
Wide Frequency Range (up to 160MHz)



ELECTRONIC PARAMETERS

Parameters		Conditions	Min.	Typ	Max.	Units
Nominal Frequency		—	100.000			MHz
Supply voltage		—	11.4	12	12.6	V
Package size		—	50×50×19			mm
Power consumption		During warm up	—	—	7.2	Watts
		Steady state @ 25°C	—	—	3.6	Watts
Freq. stability vs. load		$R_L \pm 5\%$	—	—	± 2	ppb
Freq. stability vs. supply voltage		$V_{DD} \pm 5\%$	—	—	± 2	ppb
Freq. stability vs. temperature		Referenced to 25°C (-40 to +70 °C)	—	—	± 0.1	ppm
Initial tolerance		$V_{cont} = +4V @ 25^\circ C$	—	—	± 0.5	ppm
Aging	per day	After 30 days of continues operation	—	—	± 5	ppb
	per 1st year		—	—	± 0.5	ppm
	per 10 years		—	—	± 0.3	ppm
Operating temperature range		—	-40	—	70	°C
Warm up time		@ 25 °C $\Delta F/F \leq \pm 0.5ppm$ (Based on Freq. After 1h)	—	—	3	min
Output wave		—	SINWAVE			—
Output power		$V_{DD} = 12V$	12	—	15	dBm
Output load		—	—	50	—	Ω
Harmonics		—	—	—	-25	dBc
Spurious		—	—	—	-70	dBc
Pull range		$V_{cont} = 0$ to 8V	± 1.0	—	—	ppm
Linearity		—	—	—	± 10	%
Slope		—	positive			—
Control voltage		—	0	4	8	V
Phase noise	@ 10Hz offset	@ 100MHz	—	-108	-105	dBc/Hz
	@ 100Hz offset		—	-138	-135	dBc/Hz
	@ 1kHz offset		—	-168	-165	dBc/Hz
	@ 10kHz offset		—	-172	-170	dBc/Hz
	@ 100kHz offset		—	-178	-175	dBc/Hz

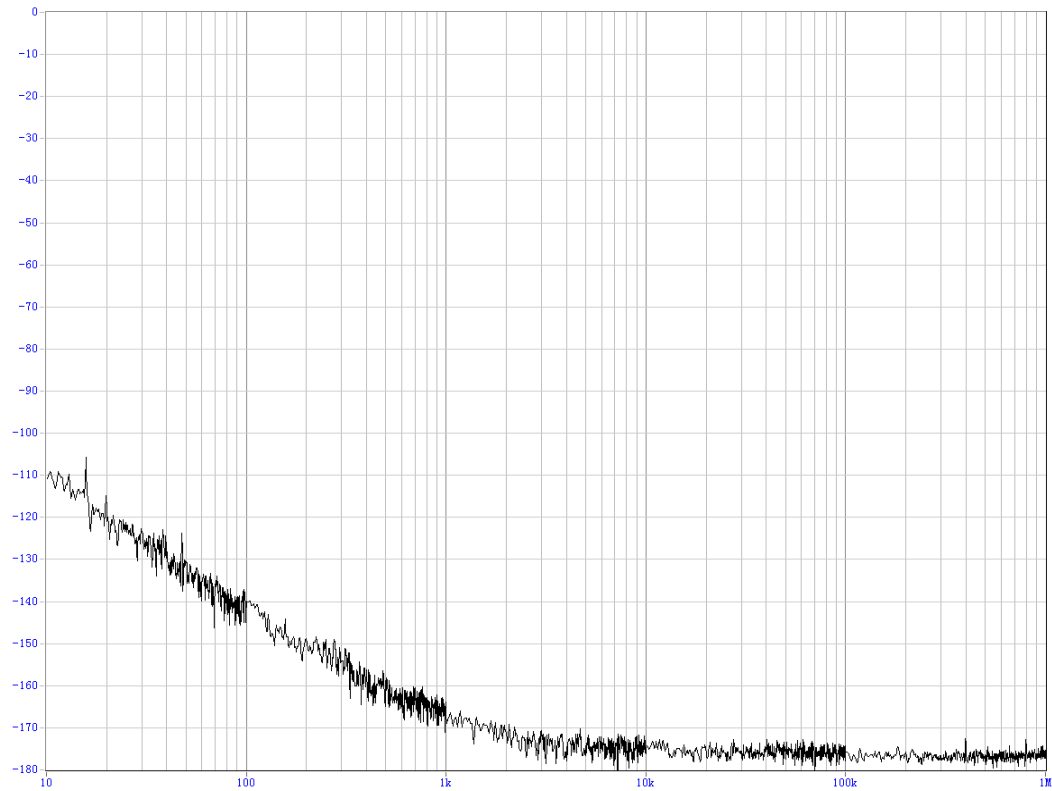
PACKAGE



PIN DESCRIPTION

- +V: Supply Voltage
- G : Ground Case
- VCO: Control Voltage Input
- OUT: RF Output

TYPICAL SSB PHASE NOISE



Notes: Consult factory about other frequencies or special requirement.