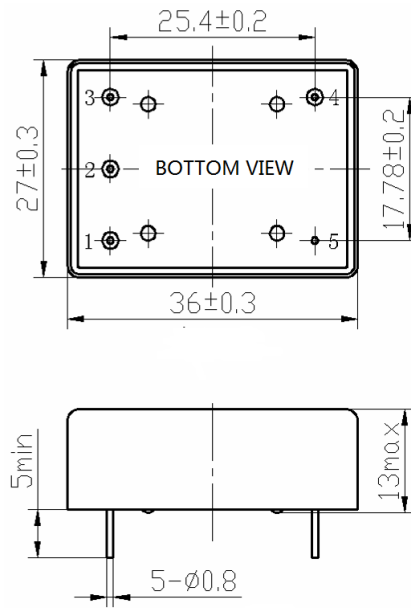


**ULTRA LOW PHASE NOISE OCXO****MODEL: SOXO15F10MSSGU****FEATURES****Ultra Low Phase Noise (-110dBc/Hz@1Hz)****High Stability ($2 \times 10^{-12}/1s$)****ELECTRONIC PARAMETERS**

Parameters		Conditions	Min.	Typ	Max.	Units
Nominal Frequency		—	10.000			MHz
Supply voltage		—	11.4	12	12.6	V
Package size		—	36×27×13			mm ³
Power consumption		During warm up	—	—	4.2	Watts
		Steady state @ 25°C	—	—	1.8	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)	—	—	±5	ppb
Short Term Stability		@25°C	—	—	2E-12	/1s
Freq. retrace		Power on after 1h, referenced to Freq. before power off 24h.	—	—	±10	ppb
Initial tolerance		$V_{cont} = +2.5V @ 25^\circ C$	—	—	±50	ppb
Aging	per day	After 30 days of continues operation	—	—	±0.5	ppb
	per 1st year		—	—	±50	ppb
	per 10 years		—	—	±0.3	ppm
Operating temperature range		—	-40	—	70	°C
Warm up time		@ 25 °C $\Delta F/F \cong \pm 0.5ppm$ (Based on Freq. After 1h)	—	—	3	min
Output wave		—	SINWAVE			—
Output power		$V_{DD} = 12V$	10	12	14	dBm
Output load		—	—	50	—	Ω
Harmonics		—	—	—	-30	dBc
Spurious		—	—	—	-80	dBc
Pull range		$V_{cont} = 0$ to 5V	±0.5	—	±1.2	ppm
Linearity		—	—	—	±10	%
Slope		—	positive			—
Control voltage		—	0	2.5	5	V
Phase noise	@ 1Hz offset	@ 10MHz	—	-110	-105	dBc/Hz
	@ 10Hz offset		—	-138	-135	dBc/Hz
	@ 100Hz offset		—	-158	-155	dBc/Hz
	@ 1kHz offset		—	-168	-165	dBc/Hz
	@ 10kHz offset		—	-172	-170	dBc/Hz
	@ 100kHz offset		—	-172	-170	dBc/Hz

PACKAGE



PIN DESCRIPTION

1. Control Voltage Input; **Vcont**
2. No Connection / Reference Voltage; **NC/Vref**
3. Supply Voltage; **Vdd**
4. RF Output; **OUT**
5. Ground Case; **GND**

TYPICAL SSB PHASE NOISE



Notes: Consult factory about other frequencies or special requirement.