



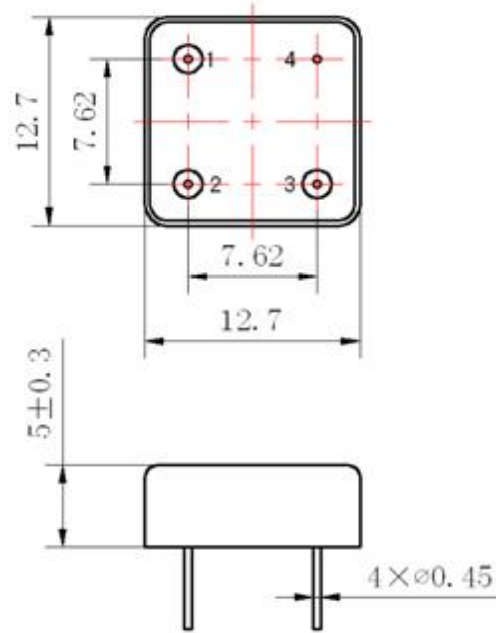
LOW POWER MINIATURE OCXO

MODEL: SOXO23F100MCSH

ELECTRONIC PARAMETERS

Parameters		Conditions	Min.	Typ	Max.	Units
Nominal Frequency		—	100.000			MHz
Supply voltage		—	4.75	5	5.25	V
Package size		—	12.7×12.7×5 (DIP8)			mm
Power consumption		During warm up	—	1.5	—	Watts
		Steady state @ 25°C	—	0.5	—	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		$V_{cont} = +2.5V @ 25^\circ C$	—	—	± 0.5	ppm
Aging	per day	After 30 days of continues operation	—	—	± 5	ppb
	per 1st year		—	—	± 0.5	ppm
	per 10 years		—	—	± 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)	—	—	30	s
Output wave		—	SINWAVE			—
Output power		—	6	8	10	dBm
Output load		—	—	50	—	Ω
Harmonics		—	—	—	-30	dBc
Spurious		—	—	—	-80	dBc
Pull range		$V_{cont} = 0$ to 5V	± 0.5	—	—	ppm
Linearity		—	—	—	± 10	%
Slope		—	positive			—
Control voltage		—	0	2.5	5	V
Phase noise	@ 10Hz offset	@ 100MHz	—	—	-90	dBc/Hz
	@ 100Hz offset		—	—	-120	dBc/Hz
	@ 1kHz offset		—	—	-150	dBc/Hz
	@ 10kHz offset		—	—	-165	dBc/Hz
	@ 100kHz offset		—	—	-165	dBc/Hz

PACKAGE



PIN DESCRIPTION

- 1: Control Voltage Input
- 2: Supply Voltage
- 3: RF Output
- 4: Ground Case