



OC 25 Series OCXO

Features: high precision, high stability, low phase noise, low aging rate, good consistency, mass production, ROHS compliance, custom application, cellular base station, GSM, CDMA, etc., system frequency synthesizer, measurement equipment, test equipment, digital exchange



Main Specifications

Typical frequency specification

Serial number	specification	Parameter value	Test Conditions
Frequency stability			
1	Nominal frequency	10.00MHz	
2	Initial frequency accuracy	$\leq \pm 200\text{ppb}$	$V_c = +2.0V, @+25^\circ\text{C}$, after working for 15 minutes
3	Power stability	$\leq \pm 2\text{PPB}$	$V_s \pm 5\%$
4	Load stability	$\leq \pm 2\text{PPB}$	Load $\pm 5\%$
5	Ageing	$\leq \pm 0.5\text{PPB/day}$ $\leq \pm 100\text{PPB/first year}$ $\leq \pm 0.4\text{PPM/10 years}$	$@25^\circ\text{C}$ after 30 days of power-on work
6	Temperature stability	$\leq \pm 10\text{PPB}$	$0^\circ\text{C} \sim +75^\circ\text{C}$, ref to $+25^\circ\text{C}$
7	Short-term stability	$\leq 0.05\text{ppb/s}$	1 hour after power-on
8	boot time	$\leq 5\text{mins}$	$\leq \pm 100\text{ppb/power-on for 5 minutes}/V_c=\text{center voltage}/25^\circ\text{C vs. 1 hour frequency}, V_c = +2.0V, @+25^\circ\text{C}$
Supply voltage / current			
9	Voltage	$+5.0V \pm 5\%$	
10	Working current	$\leq 600\text{mA initial}$ $\leq 250\text{mA steady state}$	
Output characteristics			
11	Output waveform	HCMOS	
12	Output load	15pF	
13	Output level	$V_{OH} : \geq 4.5V$ $V_{OL} : \leq 0.5V$	
14	Rise/fall time	$\leq 6\text{nS}$	
15	Duty cycle	45/55 %	
16	Clutter suppression	\	
Voltage control characteristics			
17	Voltage control range	$2.0 \pm 2.0V$	
18	Frequency range	$-2.0 \sim -1.0\text{ppm}$ $0.2 \sim +0.2\text{ppm}$ $+1.0 \sim +2.0\text{ppm}$	$V_c = 0V$ $V_c = 2.0V$ $V_c = 4.0V$
19	Voltage control slope	Positive slope	
20	Voltage controlled linearity	$< \pm 10\%$	
twenty one	Input resistance	$\geq 100k\Omega$	
twenty two	Modulation bandwidth	$> 10\text{KHz}$	
Phase noise			
twenty three	Phase noise	$-80\text{dBc/Hz}@1\text{Hz}$ $-120\text{dBc/Hz}@10\text{Hz}$ $-140\text{dBc/Hz}@100\text{Hz}$ $-145\text{dBc/Hz}@1\text{KHz}$ $-150\text{dBc/Hz}@10\text{KHz}$	
temperature range			
twenty four	Range of working temperature	$0^\circ\text{C} \sim +75^\circ\text{C}$	
25	Operating temperature range	$40^\circ\text{C} \sim +85^\circ\text{C}$	
26	Storage temperature range	$-55^\circ\text{C} \sim +105^\circ\text{C}$	
Package size			
27	Package (mm)	25.4X25.4X12.5	
28	Lead plating	Nickel plating + immersion tin	
29	ROHS	ROHS network exemption	