

Specifications

OCXO Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Frequency Range		F ₀			10.000000		MHz	
RF Output								
Output waveform				Sine wave				
Load		R _L		45	50	55	Ohm	
Output Level				+6	+8	+10	dBm	
Harmonics						-25	dBc	
Power Supply								
Supply Voltage		V _{cc}		4.75	5.0	5.25	V	
Current Consumption(Steady state)		I _{Steady}	@ +25°C		35	50	mA	
Current Consumption(Warm-up)				120		220	mA	
Warm-up time@+25°C			To Δf/f=1e-7			90	sec	
Frequency Control*								
Input Resistance					11		Kohm	
EFC Voltage		V _c		0		4.2	V	Positive
Preset Control Voltage			Disconnected V _c Pin	2.0	2.1	2.2	V	
Electronic Frequency Control(EFC)		(f _L -f)/f	V _c =0V			-1	ppm	
		(f-f)/f	V _c = V _{c0}		0		ppm	
		(f _H -f)/f	V _c = V _{ref}	1			ppm	
Reference Voltage				4.1	4.2	4.3	V	
Frequency Stability								
Initial Tolerance @+25°C			V _c = V _{c0}			+/-0.1	ppm	
Vs. Operating Temperature Range			From -30°C to +70°C			+/-50	ppb	
Vs. Supply Voltage			Ref. V _{cc} typ.			+/-2	ppb	
Aging	Long term per day		After 30days operation			+/-1.5	ppb	
	Long term per year					+/-0.15	ppm	
Phase Noise								
Phase Noise			1Hz		-90		dBc/Hz	
			10 Hz		-120			
			100 Hz		-135			
			1 KHz		-155			
			10 KHz		-165			
			100 KHz		-168			
Maximun Ratings, Enviromental and Mechanical Conditions								
Operating Temperature Range		-30°C to +70°C						
Storage Temperature Range		-60°C to +90°C						
Humidity		Non-condensing 95%						
Mechanical Shock		Per MIL-STD-202, 30G, 11ms						
Vibration		Per MIL-STD-202, 5G to 2000Hz						
Soldering Conditions		Hand solder only – not reflow compatible 260°C 10s (on pins)						
Washing Conditions		Washing with water or alcohol based detergent allowed only with final enough drying stage.						