



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F _{nom}		10		40	MHz	
RF Output							
Signal Waveform			HCMOS				
Load	R _L		10kohm/30pf				
H-Level Voltage	V _H		4			V	
L- Level Voltage	V _L				0.4	V	
Duty Factor			45		55	%	
Signal Waveform			Sinewave				
Level			225			mV	
Load		±5%		50		ohm	
Harmonics					-30	dBc	
Power Supply							
Peak warm-up current		V _{cc} =5V			600	mA	
		V _{cc} =12V			300	mA	
Steady state current @ 25°C		V _{cc} =5V			200	mA	
		V _{cc} =12V			80	mA	
Reference Voltage		V _{cc} =5V		4.5		V	
		V _{cc} =12V		5.0		V	
Warm-up Time	T _{up}	at +25°C to Δf/f=1e-7			180	sec	
Frequency Adjustment Range							
EFC voltage	V _c	V _{cc} =5V	0		4.5	V	with Potentiometer 20 kOhm
		V _{cc} =12V	0		5.0	V	with Potentiometer 20 kOhm
EFC Slope			positive				
Electronic Frequency Control (EFC)		V _{cc} =5V	±0.5			ppm	
		V _{cc} =12V	±0.5			ppm	
Frequency Stability							
Versus Operating Temperature Range						ppb	See ordering information
Versus supply voltage		±5% change			±5	ppb	
Versus load		±5% change			±5	ppb	
Aging Per Day						ppb	Contact DEI
Aging 1 st Year						ppm	See ordering information
Allan Variance		1s,10-13MHz			1	e-11	
		1s,13-20MHz			2	e-11	
		1s,20-40MHz			3	e-11	
Phase noise						dBc/Hz	See at the end of this datasheet
Environmental, Mechanical Conditions							
Vibration Frequency	10-500 Hz						
Vibration Acceleration	10gs						
Shock Acceleration	100gs						
Shock Duration	3±1mS						
Storage Temperature	-55°C to +85°C						
RoHs	Option						

Contact DEI for extended environmental conditions.



Phase Noise (dBc/Hz)

Frequency offset	HCMOS			Sinewave		
	10-13MHz	>13-20MHz	>20-40MHz	10-13MHz	>13-20MHz	>20-40MHz
1Hz	-90	-75	-70	-90	-75	-70
10Hz	-120	-105	-100	-120	-105	-100
100Hz	-140	-135	-125	-140	-135	-125
1KHz	-145	-145	-135	-150	-150	-140
10KHz	-150	-150	-140	-155	-150	-145

Contact factory for lower phase noise performance