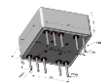


Features

- Ultra stability
- Wide operating Temp.
- DIP 20.2x20.2mm

Applications

- Wireless communication system
- Instruments
- SATCOM
- time synchronization



BO2020_8Pin Specifications

Parameter		Value			Unit	Conditions
		Min.	Typ.	Max.		
Supply Voltage		–	5.0	–	V	Vcc±5%
Start-up Current		–	–	650	mA	
Steady Current		–	–	300	mA	
Frequency Range		10 ~ 122.88			MHz	
Nominal Frequency		10,40,100			MHz	
1PPS Input	Waveform	HCMOS				50Ω
	VOH	2.7	3.3	5	V	
	VOL	–	–	0.4	V	
	Pulse width	500	–	–	ns	
1PPS Output	Waveform	HCMOS				50Ω
	VOH	2.7	3.3	–	V	
	VOL	–	–	0.4	V	
	Pulse width	0.01	100	500	ms	
	Accuracy	-30	–	30	ns	10Min after locked to 1pps.
Output with Lock Status	Lock	2.7	–	–	V	Load≤5mA
	Hold	–	–	0.4	V	Load≤5mA
Initial Frequency Tolerance		-100	–	100	ppb	No PPS input, power on 3min
Disciplined Frequency Tolerance		-0.01	–	0.01	ppb	Average after GPS lock for 120 minutes
Freq. Stability Vs. Temp.		±1	–	±5	ppb	- 40℃ ~ +85℃
Short-term Stability@10MHz@1S		–	–	1.00E-11	–	Power on 15min
Holdover Accuracy		-10	–	10	us	δT=±5℃, after GPS lock for 120 minutes, continuous testing for 24 hours
Sine wave @10MHz	Output Level	7	–	–	dBm	
	Harmonics	–	–	-30	dBc	
	Spurious	–	–	-70	dBc	
	Load	–	50	–	Ω	
CMOS @10MHz	V _{OH}	2.4	–	–	V	HCMOS Output, Load=15pf
	V _{OL}	–	–	0.4	V	HCMOS Output, Load=15pf
	Duty Cycle	45	–	55	%	(V _{OH} - V _{OL})/2
	Rise/Fall Edge	–	–	6	ns	
	Load	–	15	–	pf	HCMOS Output, Load=15pf
Warm up time		–	–	3	Min	Ambient, 5min relative 1h, accuracy ±100ppb
Supply Sensitivity		–	–	±20	ppb	Vcc±5%
Load Sensitivity		–	–	±20		Load±5%
Aging/ Day		–	–	±1		No PPS input, power on 30 days@10MHz
Aging/ First Year		–	–	±100		No PPS input, power on 30 days@10MHz
SSB Phase Noise @10MHz		–	–	-100	dBc/Hz	Offset 10Hz
		–	–	-130		Offset 100Hz
		–	–	-155		Offset 1kHz
		–	–	-165		Offset 10kHz
		–	–	-165		Offset 100kHz

The diagram illustrates the AD9500 clock divider, showing its various input and output specifications. The device is represented by a central rectangle with lines connecting to boxes containing specific parameters.

Product CM

Package :
20.0x20.0(mm)

Package Type:
A:Package A

Output Wave
H:CMOS
S:Sine Wave

Supply Voltage
1: 12Vdc
5: 5 Vdc
3: 3.3Vdc

Working Temp. :
C:-20°C ~ +70°C
G:-40°C ~ +70°C
I: -40°C ~ +85°C
U:-55°C ~ +95°C

Frequency:
xx MHz
e.g.: 10 (10MHz)

Tuning
N:No Tuning

Phase Noise:
H: -150dBc/Hz@1kHz
J: -155dBc/Hz@1kHz
K: -160dBc/Hz@1kHz

Stability
207: ±200ppb
107: ±100ppb
508: ±50ppb
309: ±3ppb

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