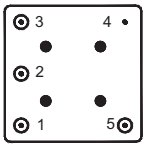
Features

- High frequency stability ～$2*10^{-10}$
- Good short term stability～$2*10^{-12}$/S
- SC cut
- Ageing ～$2*10^{-10}$/day

MP551

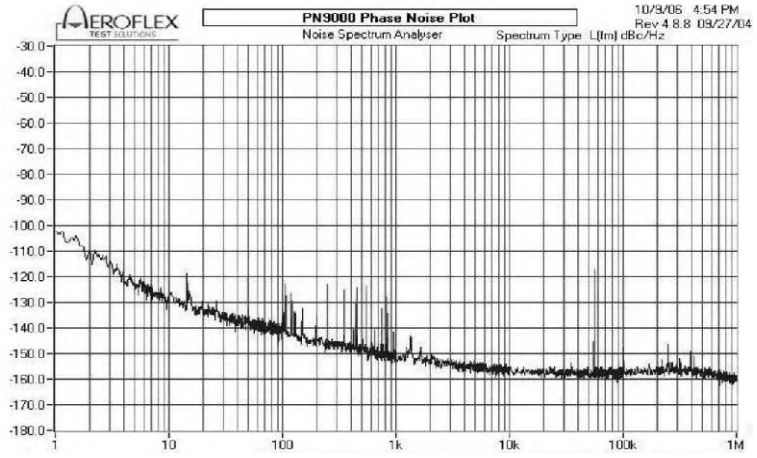


Pin function

1:Frequency control or NC
2:Reference voltage output or NC
3:RF output
4:Ground
5:Power supply

Electrical specification

Parameter			Characteristic	
Power supply			+12V±5% (option+5V)	
Frequency range			10～20MHz	
Frequency stability		Vs。temperature	±0.2~±2ppb (see the table)	
		Vs。supply changes	±0.002ppm（Max）/Vdc±5%	
		Vs。Ageing	±0.05ppm/1st (Max)	
output	Sinewave	Level	+5dBm/50Ω	
		Harmonics	≤-30dBc	
		Non-Harmonic Suppression	≤-70dBc	
	HCMOS /TTL	Rise/Falltime	≤6ns	Load:15PF
		Duty cycle	45%～55%	
Phase noise 10MHz Typical		1Hz 10Hz 100Hz 1KHz	-100 dBc/Hz -130 dBc/Hz -140 dBc/Hz -150 dBc/Hz	
short term stability			≤2×10^{-12} (τ =1s)	
Input power(turn-on/steady)			5W/2.5W(Max) @25℃	
Storage temperature range			-55～+85℃	
Frequency adjustment (control voltage±5V)			±0.5ppm(Min)(resistance adjustment)	
Dimension			50mm*50mm*25mm	

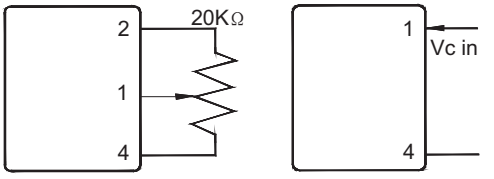


Phase noise vs Offset frequency @10MHz/12V

Frequency temperatureStability (ppm)

	±0.2	±0.5	±1	±2
0～50℃	CP	BP	AP	NP
-10～60℃	CQ	BQ	AQ	NQ
-20～70℃		BR	AR	NR
-30～70℃			AS	NS
-40～70℃				NT

Outside frequency adjustment



with variable-resistance　　with control voltage

Applications:

Precision time keeping device
GPS/GSM/UMTS/CDMA
Reference clock
Military tactical communications system
Base station

Absolute maximum ratings

Supply voltage---+15V(+6V)
Storage temperature---+105 °C

Short term stability(10MHz typical)

≤2×10^{-10}	(τ =10ms)
≤2×10^{-11}	(τ =100ms)
≤2×10^{-12}	(τ =1s)