

True Sine Wave Clock Oscillators [HS series]

HS _ _	True Sine Wave	Thru-Hole	3.3V	5.0V	Min. 10 MHz	Max. 200 MHz
50Ω load						

Features

- High purity and low total harmonic distortion. Ideal for audio modulation applications.
- For VCXOs with a Sine Wave output, please refer to "GS" series



General specifications of all available packages , at Ta=+25°C

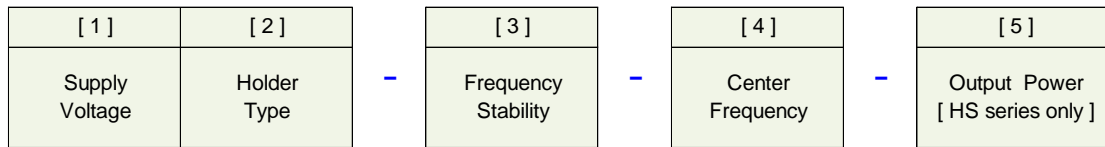
Output Wave Form	True Sine Wave				
Model	" HS " series				
Load	50Ω. (Internally AC coupled)				
Package Dimensionss , unit : mm	Thru-Hole	HS14 (20.2 * 12.8 * 6.0)			
	Gull - Wing	HS24 (20.2 * 12.8 * 7.3)			
Input Voltage (V _{DD})	+3.3V D.C.±5%		+5.0V D.C.±10%		
Frequency Range	10.0 ~ 200 MHz		10.0 ~ 156.250 MHz		
Output Level	Standard: +3.0 dBm min. Tolerance: ± 1 dBm Maximum Power: +7 dBm (User to specify)		Standard: +5.0 dBm min. Tolerance: ± 1 dBm Maximum Power: +13 dBm (User to specify)		
Current Consumption	10 MHz : 9 mA (typ.)		10 MHz : 18 mA (typ.)		
	100 MHz : 18 mA (typ.)		100 MHz : 34 mA (typ.)		
	150 MHz : 19 mA (typ.)		150 MHz : 36 mA (typ.)		
Harmonics	< - 30dBc (frequency dependent)		< - 25dBc (frequency dependent)		
Start -up Time	6.0 m Sec.(typ.)		2.0 m Sec.(typ.)		
Storage Temperature	- 50°C to 125°C		- 55°C to 125°C		
Pin 1 option	Tri-state , Output disable when taken low		No Tri-state option		
Frequency Stability Codes	Frequency Stability over Operating Temperature Range	± 25 ppm	± 50 ppm	± 100 ppm	If non-standard please enter the desired stability after the " C "or " I " represents . For example : " C20 " : ± 20 ppm over -10°C to +70°C " I30 " : ± 30 ppm over -40°C to +85°C
	Commercial -10°C to +70°C	A	B	C	
	Industrial -40°C to +85°C	D	E	F	
Aging	± 5 ppm per year (max.)				

Outline Dimensions (Unit : mm) , Suggested pad Layout for SMDs

[HS14]	[HS24]
<p style="text-align: center;">Pin Connections : Pin 1 : No connection Pin 7 : Ground Pin 8 : Output Pin 14 : Supply voltage</p>	<p style="text-align: center;">Pin Connections : Pin 1 : No connection Pin 7 : Ground Pin 8 : Output Pin 14 : Supply voltage</p>

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Part Number Format and Example

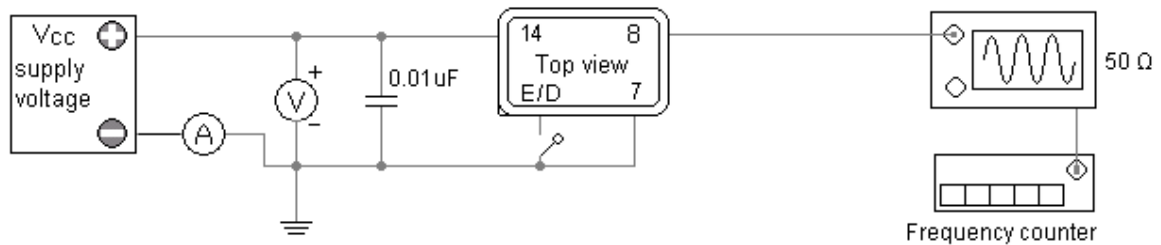


Example (1) 3 HS14 - A - 100.000 - 5

Ex (1) : **3HS14 - A - 100.000 - 5** [+3.3V , True Sine wave , 50 Ω load , RoHS , ±25ppm from -10°C to 70°C , 100.000MHz , Output power is 5dBm ±1dB]

[1]	Supply voltage , " 3 " for +3.3V ; " 5 " for +5.0V	
[2]	Holder Type	
[3]	-10°C ~ 70 °C	" A " ± 25ppm ; " B " ± 50ppm ; " C " ± 100ppm ; If non-standard please enter the desired stability after " C " , for example " C15 " : represents ±15ppm over -10 to +70°C
	-40°C ~ 85 °C	" D " ± 25ppm ; " E " ± 50ppm ; " F " ± 100ppm ; If non-standard please enter the desired stability after " I " , for example " I20 " : represents ±20ppm over -40 to +85°C
[4]	Frequency in MHz	
[5]	Output power in dBm (HS series only)	

50 Ω Load Test Circuit : For " HS " series



Output Wave Form

