

# SAW Based VCXO

## PVS142A Series

True Sinewave  
4PAD SMD  
2.7mm height  
Ultra low Noise



### \* PART NUMBERING GUIDE

**PVS142A - 5 SXXX 2C5 - A - 1000.000M**

Frequency  
M : MHz

Supply Voltage  
5 : 5.0V

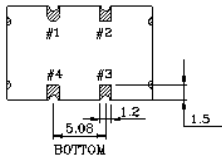
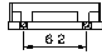
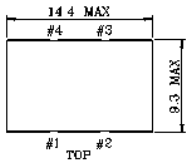
Output  
S : SINEWAVE

Stability vs. Temperature  
200 : 200ppm / 100 : 100ppm

Pulling Range  
5 : APR ±50ppm min.  
X : APR ±X0ppm min.

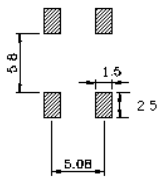
Temperature Range  
2C : -20-70 / 4F : -40-85

### MECHANICAL DIMENSIONS

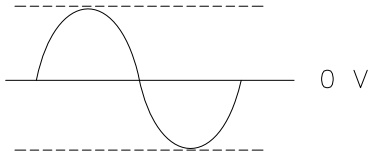


**CONNECTION**  
#1 V.C or N.C  
#2 GND  
#3 OUTPUT  
#4 Vcc

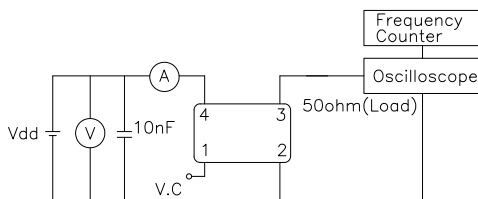
#### Recommended Soldering Pattern



### OUTPUT WAVEFORM

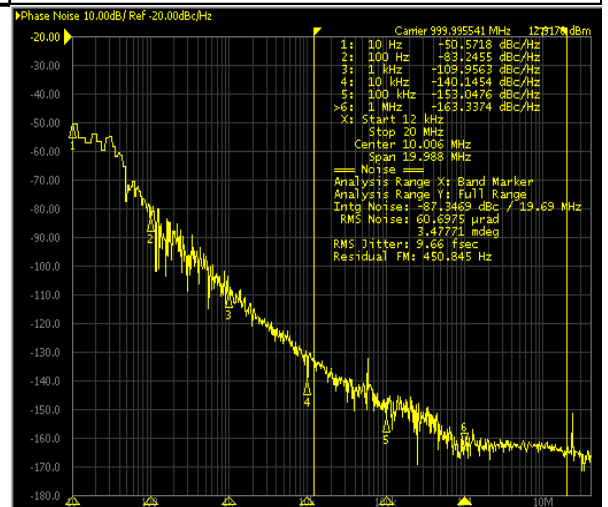


### TEST CIRCUIT



### ELECTRICAL SPECIFICATION

Frequency range	245.760MHz to 1600.000MHz (Special frequency can't be supplied)
Frequency Stability vs. Temperature	±200.0ppm typical (±100.0ppm typ. available)
Temperature Range	Operating: -20 to +70°C or -40 to +85°C Storage: -45°C to 90°C
Supply Voltage	5.0V ± 5%
Input Current	35mA max.
Output characteristics	True Sinewave Level +10dBm min. Load 50Ω Startup time 10ms max.
2 <sup>nd</sup> Harmonics Sub-Harmonics Modulation BW	-15dBc max. None > 20KHz @-3dB
Phase Noise Typical @100MHz	-105dBc/Hz@1KHz, -138dBc/Hz@10KHz -150dBc/Hz@100KHz, -160dBc/Hz@1MHz -170dBc/Hz@10MHz
Pull Characteristics	
Pullability	APR ±50ppm min. (See PART NUMBER GUIDE)
Control Range	2.5V ± 2.5V
Linearity	20% max.



### ENVIROMENTAL & MECHANICAL SPECIFICATION

Shock	MIL-STD-883C, Method 2002, Condition B
Vibration	MIL-STD-883C, Method 2007, Condition A
Solderability	MIL-STD-883C, Method 2003
Seal integrity	MIL-STD-883C, Method 1014, Condition C & A2
Marking	MIL-STD-202F, Method 215