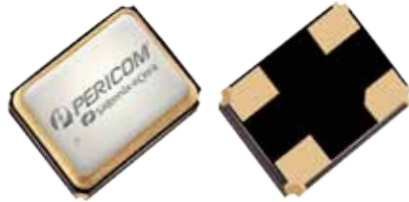


1.8V ~ 3.3VDC Clipped Sinewave VCTCXO

WC325



3.2 x 2.5mm Ceramic SMD

Typical Frequencies available MHz:		
16.367667	16.369	19.200
25.000	26.000	40.000

Product Features

- Low Current
- Tight temperature stability
- Clipped Sinewave output levels
- Excellent Phase Noise
- Industrial Temperature Range
- Pb-free and RoHS/Green compliant
- Fast lead time

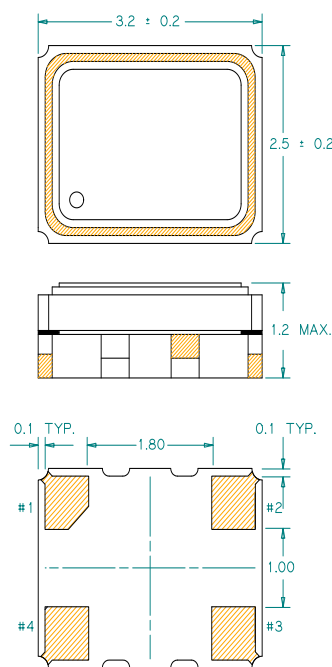
Product Description

The WC325 VCTCXO series is a high performance temperature compensated oscillator with a clipped sinewave output for a very low operating supply current. It supports various power supply voltages, stabilities and other features. It is designed to meet existing application requirements.

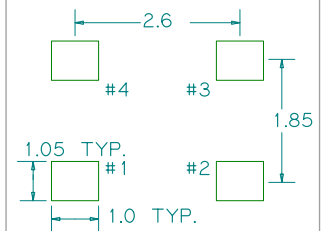
Applications

- Networking systems
- Networking
- GPS/Navigation
- Metering
- Mobile and wireless
- Handset

Package: (scale-none, dimensions in mm)



Recommended Land Pattern:



Pin Functions:

Pin	Function
1	Control Voltage
2	Ground
3	Output
4	V _{DD}

Part Ordering Information:

WC325 V X FFFF.FFFFFFF

Voltage:	Stability and Temp Range:				Frequency: FFFFFFFF MHz, "4 digits/decimal/6 digits" format
	Temp Range	A	F	K	
1 = +3.3V	-20/+70C	A	F	K	P
2 = +2.5V		B	G	L	Q
3 = +1.8V		C	H	M	R
4 = +1.5V		D	I	N	S
B = +3.0V		E	J	O	T
C = +2.8V			W	X	Z
D = +2.7V					
E = +2.85V					
F = +2.75V					
G = +2.4V					

Following the above format, PSE Technology Corporation part numbers will be assigned upon confirmation of exact customer requirements.



Electrical Performance

Parameter	Min.	Typ.	Max.	Units	Notes	
Output Frequency	10		40	MHz		
Supply Voltage	1.8		3.3	V	See ordering options, V _{DD} ±5%	
Supply Current			2.0	mA	Output Frequency ≤ 30 MHz	
			2.1	mA	Output Frequency > 30 MHz	
Output Voltage Level	0.8		1.4	V	Pk-Pk	
Control Voltage Center		0.9		V	For V _{DD} ≤ 2.3V	
		1.4		V	For V _{DD} > 2.3V	
Control Voltage Range	0		1.8	V	For V _{DD} ≤ 2.3V	
	0.4		2.4	V	For V _{DD} > 2.3V	
Frequency Adjustment Range (Pulling Range)	-8		8	ppm		
Linearity			10	%	Positive slope	
Input Impedance	500			kΩ		
Modulation Bandwidth	10			kHz		
Output Load	Resistance	9	10	11	kΩ	
	Capacitance	9	10	11	pF	
Frequency Stability	vs Temperature	±0.5		±5.0	ppm	See ordering options
	vs Load			±0.2	ppm	±10% load change
	vs Voltage			±0.1	ppm	±5% supply voltage change at typical load
Frequency Aging			±1.0	ppm	First year, +25°C	
Frequency Tolerance After Two Reflows			±2.0	ppm	@ +25°C ± 3°C after one hour recovery	
Harmonics			-7	dBc		
Operating Temperature Range	-30		85	°C	See ordering options	
Storage Temperature Range	-40		85	°C		
Phase Noise at 1KHz offset		-128		dBc/Hz	At 26MHz	

Notes:

- For specifications other than those listed, please contact sales.
- Not all combinations of V_{DD}, Operating Temperature Range, Frequency Stability and Output Frequency are available.
- Frequency Stability vs. Temperature is reference to the mid-point between minimum and maximum frequency values over the specified Operating Temperature Range
- Frequency Stability vs. Voltage and vs. Load changes are reference to the Nominal Frequency at 25°C

For the latest product information visit: <http://www.pericom.com/products/crystals-and-crystal-oscillators/tcxo/?part=WC325>

For test circuit go to: http://www.pericom.com/assets/sre/VCTCXO_CLIPPEDESINE_RevA.pdf

For soldering reflow profile and reliability test ratings go to: <http://www.pericom.com/assets/sre/reflow.pdf>

For tape and reel information go to: http://www.pericom.com/assets/sre/tr_3225_xo.pdf