

Features:

- 622.08 MHz VCSO
- Low Profile Surface Mount Package
- Excellent solder reflow performance
- PCB Substrate for excellent TCE match

Description and applications:

Surface mount 9x14 mm VCSO operating at a 5.0V supply with complementary PECL outputs for use in datacom applications


Electrical Specifications:

VCS1003A	Specification
Center Frequency Fo	622.08 MHz
Supply Voltage ($\pm 5\%$)	5.0 V
Current Drain	60 mA max.
Frequency Stability (-40C to 85C)	± 150 ppm
Operating Temperature	-40° to +85°C
Tuning Voltage Range	0.5V to 4.5V
Absolute pull range over all conditions	± 75 ppm minimum
Positive gain transfer (Kv)	180 ppm/V typical
Output voltage swing (p-p)	500 to 800 mV {100K PECL compatible}
Linearity	+/- 3% typical: $\pm 10\%$ max.
Output rise & fall times	250 ps typical; 400 ps max.
Spurious suppression	50 dBc min; 60 dBc typical
Data symmetry	45% min; 55% max.
Phase jitter (p-p)	< 5 psec
RMS phase jitter (50 kHz to 80 MHz)	< 1 psec

Pinout information:

Pin	Symbol	Function
1	Vc	VCSO control voltage
2	E/D	Output Disable Disabled = LVPECL Logic 0 (or GND) Enabled = LVPECL Logic 1 (or Open)
3	GND	Case & electrical ground
4	OUTPUT	VCSO output
5	/OUTPUT	VCSO complementary output
6	Vcc	Power supply voltage

Enable/Disable Function

Enable: Logic 1 or Open

Disable: Logic 0 (or GND)

Mechanical Dimensions : 9.0 mm x 14.0 mm x 3.0 mm (max.)

All Dimensions are in Millimeters

