

## PECL OUTPUT VCXO IN 9x14 mm FR4/PCB SMD PACKAGE - VCFRPE Series

## FEATURES

- RoHS Compliant (Pb-Free), Low Phase Jitter, EMI Shielded, Complementary Output Standard
- Commercial or Industrial Temperature Range, Wide Pull Range Available
- Low Profile SMD Package with Industry Standard Footprint, Compatible with J-Leaded Package

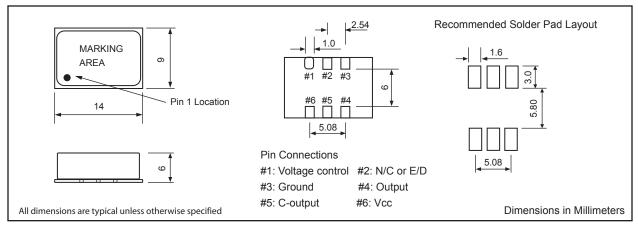
## **SPECIFICATIONS**

Frequency Range	10 MHz to 200 MHz (PECL, Vcc=5V); to	o 622.08 MHz (LV-PECL, Vcc=3.3V)
Input Voltage (Vcc) Input Current	A = +5 VDC ± 5%;  B = +3.3 VDC ± 5% 40 mA Max @ 10.0 MHz - 40 MHz;  60 mA Max @ 40.001 MHz - 100 MHz;	
	100 mA Max @ 100.001 MHz - 622.08 l	-
Control Voltage (Vc)	+2.5V ± 2.0V for 5.0V part; +1.65V ± 1.	
Storage Temperature	-55°C to 125°C	
Frequency Stability / APR (Min	$B = \pm 25 / \pm 50 \text{ ppm}; C = \pm 50 / \pm 100 \text{ ppm}$	n; D = ±25 / ±75 ppm; E = ±20 / ±50 ppm
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; G =	
Standard Stability / Pullability	BA = $\pm 25$ ppm / 0°C to 70°C, Absolute p	
Duty Cycle		netry; 2/3 = Non-tristate/Tristate 55/45% symmetry
Output Load	50 Ohms to Vcc-2V or Thevenin Equiv.	Bias Required
Logic "1" / Logic "0" Level	Vcc-0.96 Min, Vcc-0.81 Max / Vcc-1.85 Min, Vcc-1.65 Max	
Rise/Fall Time (Tr/Tf)	1 ns Maximum at 20% to 80% Vp-p	
Start-up time	10 ms Maximum	
Phase Jitter (RMS, 1 Sigma)	0.4 ps Typical for fj = 12KHz to 20MHz,	Multiplier IC for frequency > 155.520MHz
Modulation Bandwidth	10 kHz Minimum at -3 dB	
Linearity / Slope	±20% Maximum of best straight line fit	Positive
Setability at Fnom, 25°C	+2.5V ±0.5V for 5.0V part; +1.65V ±0.4	V for 3.3V part
Aging	±5 ppm Maximum / Year	
Tristate Function	Input (Pin 2) High (> 2.5V): Output disa	bled
	Input (Pin 2) Low (< 0.5V) or floating: C	output active
Enable/Disable Time	100 ns Maximum	
Creating a Part Number	VCFRPE-155M520-B B A 2	
Product S		cle (see above)
Frequenc	Operaul	ng Temperature Range: A = 0 to 70°C
		ity / APR (Min): B = -40 to 85°C
Supply vo	$A = \pm 50 /$	G = -10 to 70°C

 $B = \pm 25 / \pm 50 \text{ ppm}$ 

 $C = \pm 50 / \pm 100 \text{ ppm}$  $D = \pm 25 / \pm 75 \text{ ppm}$ 

## **OUTLINE DRAWING**



B = 3.3V

X = Customized Temp Range