

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 622.08 MHz (LV-PECL, Vcc=3.3V)

Input Voltage (Vcc) $A = +5 \text{ VDC} \pm 5\%$; $B = +3.3 \text{ VDC} \pm 5\%$

Input Current 40 mA Max @ 10.0 MHz - 40 MHz; 60 mA Max @ 40.001 MHz - 100 MHz;

100 mA Max @ 100.001 MHz - 622.08 MHz

Control Voltage (Vc) +2.5V ± 2.0V for 5.0V part; +1.65V ± 1.35V for 3.3V part

Storage Temperature -55°C to 125°C

Frequency Stability / APR (Min) $B = \pm 25 / \pm 50 \text{ ppm}$; $C = \pm 50 / \pm 100 \text{ ppm}$; $D = \pm 25 / \pm 75 \text{ ppm}$; $E = \pm 20 / \pm 50 \text{ ppm}$

Temperature Range A = 0° C to 70° C; B = -40° C to 85° C; G = -10° C to 70° C

Standard Stability / Pullability BA = ±25 ppm / 0°C to 70°C, Absolute pull range (APR): ±50 ppm Minimum

Duty Cycle 0/1 = Non-tristate/Tristate 60/40% symmetry; 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 ±0.4V for 3.3V part

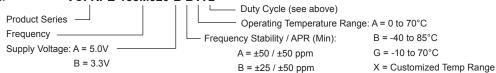
Aging ±5 ppm Maximum / Year

Tristate Function Input (Pin 2) High (> 2.5V): Output disabled

Input (Pin 2) Low (< 0.5V) or floating: Output active

Enable/Disable Time 100 ns Maximum

Creating a Part Number VCFRPE-155M520-B B A 2



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

OUTLINE DRAWING

