

FOX 3.3V SMD LV-PECL OSCILLATOR MODEL: VCP6_AXT SERIES



FEATURES

- 3.3V Operation
- LV-PECL
- Enable/Disable
- Tape and Reel (2,000 pcs. STD)

OPTIONS

- -40°C ~ +85°C Option ('R' Version)



PRELIMINARY



• PART NUMBER SELECTION Learn More - Internet Required

| Part Number | Model Number | APR ¹ | Operating Temperature | Frequency Range (MHz) |
|---------------------|--------------|------------------|-----------------------|-----------------------|
| 628-Frequency-xxxxx | VCP65AXT | ±30PPM | -10 ~ +70 (°C) | 50.000 ~ 600.000 |
| 678-Frequency-xxxxx | VCP65AXTR | ±30PPM | -40 ~ +85 (°C) | 50.000 ~ 600.000 |
| 627-Frequency-xxxxx | VCP62AXT | ±55PPM | -10 ~ +70 (°C) | 50.000 ~ 600.000 |

• ELECTRICAL CHARACTERISTICS

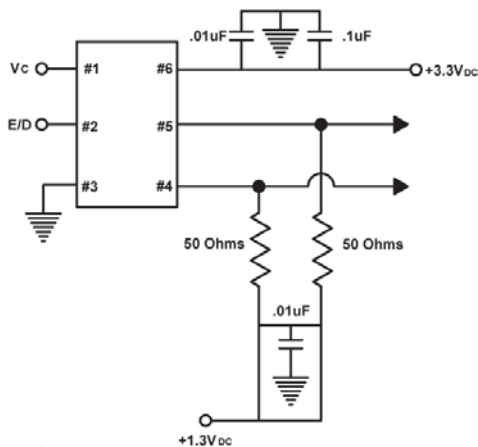
| PARAMETERS | MAX (unless otherwise noted) |
|---|------------------------------|
| Frequency Range (Fo) | 50.000 ~ 600.000 MHz |
| Storage Temperature Range (T _{STG}) | -55°C ~ +125°C |
| Supply Voltage (V _{DD}) | 3.3V ± 5% |
| Input Current (I _{DD}) | 120mA |
| Output Symmetry (50% V _{p-p}) | 40% ~ 60% |
| Rise Time (20% ~ 80% V _{p-p}) (T _R) | 0.5nS |
| Fall Time (80% ~ 20% V _{p-p}) (T _F) | 0.5nS |
| Output Voltage (V _{OL}) | 1.7V |
| (V _{OH}) | 2.2V Min |
| Output Load | See Recommended Circuit |
| Start-up Time (T _s) | 10mS |
| Output Disable Time | 100nS |
| Output Enable Time | 10mS |
| Frequency Linearity | ±10% |
| Modulation Bandwidth | 20 kHz Min |
| Phase Noise (@ 10kHz) | -120dBc/Hz |
| Phase Jitter (12kHz ~ 20MHz) | 1pS RMS |

¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, vibration and V_c = 1.65V ± 1.5V.

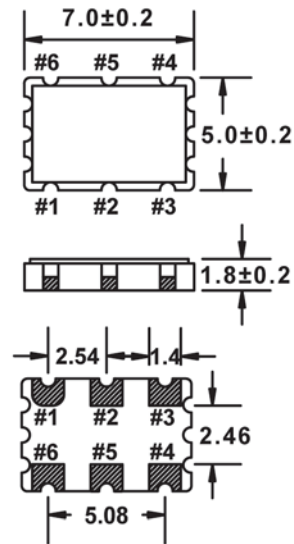
² An internal pulldown resistor from pin 2 to pin 3 allows active output if pin 2 is left open. Note: A 0.01µF bypass capacitor should be placed between V_{DD} (Pin 6) and GND (Pin 3) to minimize power supply line noise.

All specifications subject to change without notice. Rev. 3/28/05

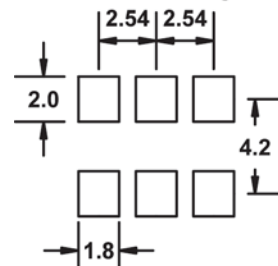
VCP6_AXT Series Recommended Circuit



Learn more about:
Part Marking Identification
Tape and Reel Specification
Internet required



Recommended Solder Pad Layout



Pin Connections

- #1 V_c
- #2 E/D or NC
- #3 GND
- #4 Output 1
- #5 Output 2
- #6 V_{DD}

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION ²

| (Pin 2) | OUTPUT (Pin 4, Pin 5) |
|---|-----------------------|
| OPEN | ACTIVE |
| '1' Level V _{IH} ≥ V _{DD} -1.1V | High Z |
| '0' Level V _{IL} ≤ V _{DD} -1.6V | ACTIVE |