

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

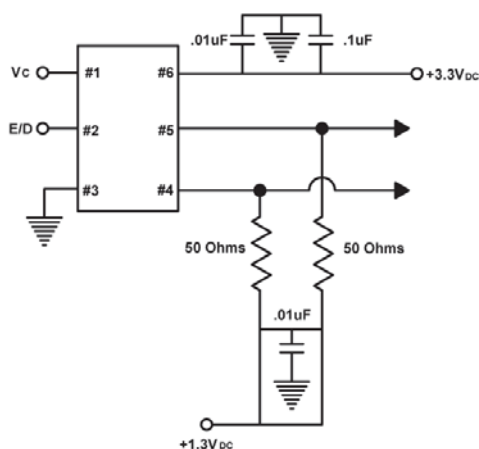
¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, vibration and V_C = 1.65V ± 1.5V.

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.

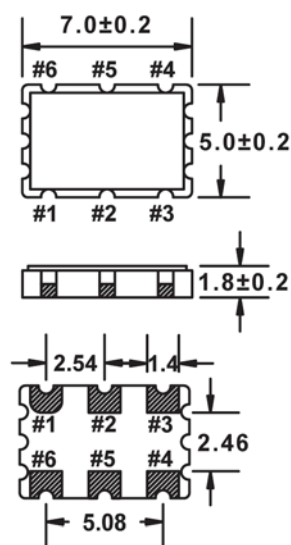
All specifications subject to change without notice. Rev. 3/28/05

VCP6_AXT Series Recommended Circuit

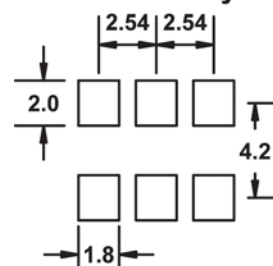


Learn more about:
Part Marking Identification
Tape and Reel Specification

Internet required



Recommended Solder Pad Layout



Pin Connections

#1 Vc	#4 Output 1
#2 E/D or NC	#5 Output 2
#3 GND	#6 VDD

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