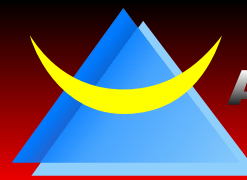


VCD5P(3P) SERIES

- 6 J-Leads Ceramic SMD VCXO
- 5.0 and 3.3
- Wide Frequency Range
- Jitter as Low as 1pSec



ASCEND

FREQUENCY DEVICES

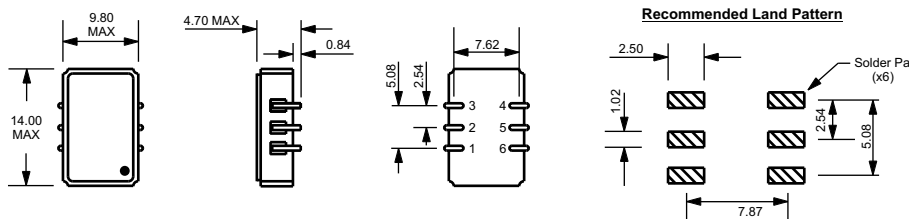
Electrical Specifications

Frequency Range:	-	70.000MHz to 622.080MHz
Frequency Stability:	-	±100ppm to ±20ppm (Inclusive of Temperature, Load, Voltage, and Aging)
Operating Temperature Range:	-	0°C to +70°C, -20°C to +70°C, -40°C to +85°C, or -55°C to +125°C
Storage Temperature Range:	-	-55°C to +125°C
Supply Voltage (Vdd):	-	5.0Vdc ±5% or 3.3Vdc ±5%
Supply Current:	-	60mA maximum (3.3Vdc ±5%); 85mA maximum (5.0Vdc ±5%)
Output Voltage:	Logic 0 Logic 1	Vdd -1.620 Vdc maximum Vdd -1.025 Vdc minimum
Duty Cycle:	50% of waveform	40/60%, 45/55%, or 47.5/52.5%
Load Drive Capability:	-	50 Ohms into Vdd -2.00Vdc
Rise/Fall Time:	20% to 80% of waveform	5nSec maximum
Jitter:	RMS	1pSec maximum, 3pSec maximum, or 18pSec maximum
Control Voltage Range:	Vdd = 3.3V Vdd = 5.0V	1.65Vdc ±1.5Vdc 2.50Vdc ±2.0Vdc
Linearity:	-	±10% maximum
Pullability:	-	±200ppm, ±100ppm, ±50ppm, or ±25ppm
Enable High	Standard	Vcc - 2.0V min. = output enabled, Vcc - 0.80V max. = output disabled
Enable Low	Optional	Vcc - 1.62 VDC max. = output enabled, Vcc - 1.025 VDC min. = output disabled

Mechanical Dimensions

Humidity:	85% RH, 85°C, 48 Hours
Hermetic Seal:	Leak Rate 2 X 10 ⁻⁸ ATM-CM ³ /sec max
Solderability:	MIL-STD-202G, Method 208
Reflow Solderability:	260°C for 10 seconds
Vibration:	MIL-STD-202G, Method 204 35G, 50 to 2000 Hz
Shock:	MIL-STD-202G, Method 203 Test Cond E, 1000G's, ½ Sinewave
MIL-STD-883:	Available with Level B Screening

Mechanical Dimensions



Pad	FUNCTION
1	Voltage Control
2	Enable/Disable
3	Case Ground
4	Output
5	Complimentary Output
6	Supply Voltage (Vdd)

MARKING

Line 1: AXX.XXX
Line 2: XXXXXX (Date Code)

Part Numbering Guide

VCD 5P A 1 A A 1 L - 70.000M

Series
6 J-Leads Ceramic SMD VCXO

Supply Voltage
5P = 5.0V (PECL)
3P = 3.3V (LVPECL)

Freq. Toler/Stab.
A = ±100PPM
B = ±50PPM
C = ±25PPM
D = ±20PPM

Temperature Range
1 = 0°C to +70°C
2 = -20°C to +70°C
3 = -40°C to +85°C
4 = -55°C to +125°C

Frequency

Enable/Disable
Blank = Enable High
L = Enable Low

Jitter
1 = 1pSec Maximum
3 = 3pSec Maximum
8 = 18pSec Maximum

Pullability
A = ±200ppm
B = ±100ppm
C = ±50ppm
D = ±25ppm

Duty Cycle

A = 40% / 60%
B = 45% / 55%
C = 47.5% / 52.5%**

**Option C (47.75% / 52.5%) Available up to 500MHz only