



PJ-A2D00 Series Continued  
LVDS

Rev. J

## Operating Conditions and Output Characteristics

### Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max
Frequency	----	----	80.0MHz	----	312.5MHz
Duty Cycle <sup>(2)</sup>	----	@ V <sub>O</sub> /2	45/55%	----	55/45%
Logic 0 <sup>(2)</sup>	V <sub>OL</sub>	----	0.80V	----	1.10V
Logic 1 <sup>(2)</sup>	V <sub>OH</sub>	----	1.25V	----	1.55V
Differential Voltage <sup>(2)</sup>	V <sub>OD</sub>	----	250 mV	----	450 mV
Disable Voltage	----	V <sub>EE</sub> =0V	----	----	0.8V
Enable Voltage <sup>(5)</sup>	----	V <sub>EE</sub> =0V	2.0V	----	----
Rise & Fall Time <sup>(2)</sup>	tr,tf	20-80%V <sub>O</sub>	----	0.8 ns	1.0 ns
Tpd <sup>(4)</sup>	----	----	-0.5 ns	----	+0.5 ns
Jitter, RMS <sup>(3)</sup>	----	----	----	----	3 psec
Frequency Stability <sup>(1)</sup>	dF/F	Overall conditions including: voltage, calibration, temp., 10 yr aging, shock, vibration	-100ppm	----	+100ppm

### General Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max
Supply Voltage	V <sub>CC</sub>	----	3.135V	3.3V	3.465V
Supply Current	I <sub>CC</sub>	----	0.0 mA	----	80 mA
Output current	I <sub>O</sub>	Continuous Output Current	0.0 mA	----	±50.0 mA
Operating temperature	T <sub>A</sub>	----	0°C	----	70°C
Storage temperature	T <sub>S</sub>	----	-55°C	----	125°C
Power Dissipation	P <sub>D</sub>	----	----	----	277 mW
Solder temperature	T <sub>L</sub>	4 minutes	----	----	253°C
Load	100 ohms across differential outputs		----	----	----
Start-up time	t <sub>s</sub>	----	----	2 ms	10 ms

### Environmental and Mechanical Characteristics

Mechanical Shock	Per MIL-STD-202, Method 213, Condition E
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Vibration	0.060" double amplitude 10 Hz to 55 Hz, 35g's 55Hz to 2000 Hz
Hermetic Seal	Leak rate less than 1 x 10 <sup>-8</sup> atm.cc/sec of helium

#### Footnotes:

- 1) Standard frequency stability (±20,±25,±50ppm & others available)
- 2) With Load of 100 ohms across differential outputs.
- 3) Jitter performance is frequency dependent. Please contact factory for full Wavecrest characterization. RMS jitter bandwidth of 12kHz to 20MHz.
- 4) Tpd is phase shift between the falling edge of pin 4 and the rising edge of pin 5.
- 5) Open to enable pin also enables the output

Creating a Part Number	
<b>PJ - A2D0X - FREQ</b>	
<b>Package Code</b>	<b>Tolerance/Performance</b>
PJ 6 J Lead SMD	0 ±100ppm 0-70°C
	1 ±50ppm 0-70°C
	7 ±25ppm 0-70°C
	9 Customer Specific
<b>Input Voltage</b>	A ±20ppm 0-70°C
Code Specification	B ±50ppm -40 to +85°C
A 3.3V	C ±100ppm -40 to +85°C
B 2.5V	
5V	

