



**CRYSTEK**  
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A DIVISION OF CRYSTEK CORPORATION

**CCLD-054X-20-622.080**  
**LVDS Clock Oscillator**



**Model CCLD-054X is a 622.080Mhz LVDS Clock Oscillator operating at 3.3Volts. Enable/Disable function used for system testing is offered as a standard feature. Operating Temperature is from -40 to +85C with +/-20PPM Frequency Stability.**



5x7mm SMD

### **Applications:**

**Digital Video**  
**SONET/SDH/DWDM**  
**Storage Area Networks**  
**Broadband Access**  
**Ethernet, Gigabit Ethernet**



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Performance Specification	Min.	Typ.	Max	Units
Nominal Frequency:	622.08			MHz
Frequency Stability			±20	ppm
Output Phase Noise				
@1KHz Offset		-100		dBc/Hz
@10KHz Offset		-125		dBc/Hz
@100KHz Offset		-138		dBc/Hz
@1MHz Offset		-140		dBc/Hz
@10MHz Offset		-142		dBc/Hz
Jitter: 12KHz-20MHz			2	pS,RMS
Differential Clock Rise Time	0.2	0.5	0.7	nSec
Differential Clock Fall Time	0.2	0.5	0.7	nSec
Output High Voltage, VOH		1.40	1.60	V
Output Low Voltage, VOL	0.90	1.10		V
Differential Output	247	330	454	V <sub>OD</sub>
Differential Output Error			50	mV
Differential Output Skew			200	pSec
Output Leakage Current			±10	uA
Output Load (differential)	100			Ohms
Enable High Voltage, VIH	0.7*VCC		VCC	V
Disable Low Voltage, VIL	GND		0.3*VCC	V
Output Enable/Disable Time			400	nSec
Duty Cycle @ 1.25V(LVDS)	45	50	55	%
Offset Voltage	1.125	1.2	1.375	V
Offset Error	0	3	25	V
Supply Voltage	3.15	3.3	3.45	V
Supply Current, Icc Enabled			80	mA
Supply Current, Icc Disabled			10	uA
Operating Temp.	-40		+85	°C
Storage Temp.	-45		+90	°C

Parameter	Conditions
Mechanical Shock	MIL-STD-883, Method 2002
Mechanical Vibration	MIL-STD-883, Method 2007
Solderability	MIL-STD-883, Method 2003
Resistance to Solvents	MIL-STD-883, Method 2016



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