

Features:

- Complementary Output Available
- Tight Frequency Stability Available
- Optimal Jitter Performance
- Stabilities as tight as ± 25 ppm



The EXO55 series is an ECL compatible clock oscillator that is perfect for server and Gigabit Ethernet applications requiring tight stability and reliable performance. It comes in a 14 pin DIP package and is available over a wide range of frequencies. Complementary outputs and enhanced stabilities are also available.

Electrical Specifications:

Specifications (Load = 50Ω into Vcc -2.0VDC)

PARAMETER	SYMBOL	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
Supply Voltage	Vcc	Operating	4.94	5.20	5.46	V
		Absolute Maximum			7.0	V
Supply Current	Icc				100	mA
Start-up Time	Ts				10	ms
Output Voltage-HI	VOH	0 to 70°C	Vcc-1.02		Vcc-.74	V
		-40 to 85°C	Vcc-1.06		Vcc-.65	
Output Voltage-LO	VOL	0 to 70°C	Vcc-1.95		Vcc-1.60	V
		-40 to 85°C	Vcc-1.95		Vcc-1.57	
Symmetry	Duty	Measured at 50% of waveform	40		60	%
Rise & Fall Time	Tr,Tf	Measure from 20% to 80% of waveform		1.5	2.5	ns
Jitter		peak-peak		30	50	ps



DIP 14

Pin Connections

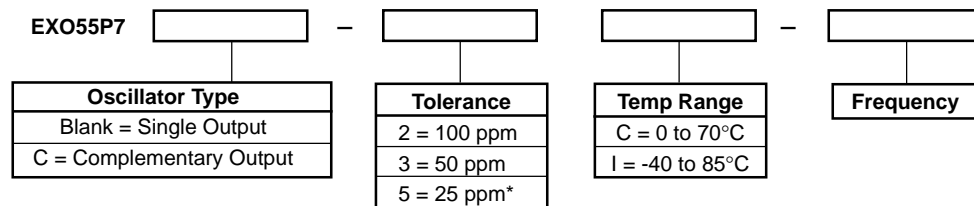
PIN	FUNCTION
1	NC or Comp Out
7	Case/CKT GND
8	Output
14	Vcc

CLOCKS

Environmental Characteristics:

Storage Temperature:	-55°C to +125°C	Corrosion Resistance:	24 hours, per MIL-STD-883, Method 1009 condition A
Temperature Cycle:	25 cycles, -55°C to +125°C per MIL-STD-883, Method 1010	Solderability:	per MIL-STD-883, Method 2003 or MIL-STD-202, Method 208. Except 1 hr. Pre-conditioning
Constant Acceleration:	5000g's, 0.5mS, 3 shocks per direction, per MIL-STD-883, Method 2002	Quality:	In accordance with MIL-1-45208
Sinusoidal Vibration:	0.06" D.A., 10 to 55 Hz and 30g's, 55 to 2000 Hz, 3 cycles per direction, per MIL-STD-883, Method 2007	Resistance to Soldering Heat:	per MIL-STD-202, Method 210 conditions A and C
Random Vibration:	20G ^{RMS} , 20 to 2000 Hz, per MIL-STD-883, Method 2026	Marking Permanence:	per MIL-STD-883, Method 2015
Lead Integrity:	per MIL-STD-883, Method 2004 conditions B1 and B2	Thermal Resistance:	per MIL-STD-883, Method 1012.1
Hermeticity:	3 x 10 ⁴ ATM-cc/sec, per MIL-STD-883, Method 1014 conditions B1 and B2	Electrostatic Discharge Sensitivity:	per MIL-STD-883, Method 3015 ECL output models-> 4KV (Class 2- not sensitive) CMOS output models-> 2KV (Class 1 - not sensitive)
Moisture Resistance:	10 cycles, per MIL-STD-883, Method 1014 with step 7 subcycle omitted	Steady-State Life: 1000 hrs. @ 125°C per MIL-STD-883, Method 1005, disregarding frequency shift	
		Frequency Aging: <10 ppm shift in 30 days @ 85°C ambient	

Configuring The Part Number...



*0 to 70°C only