

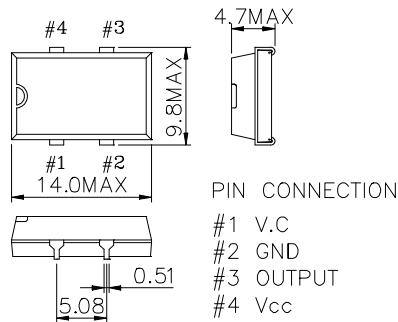
# Excequal

Clock Oscillator

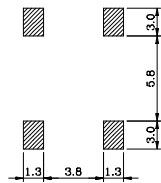
# CO149P

1MHz ~ 200MHz HCMOS/TTL 15pF or 10TTL

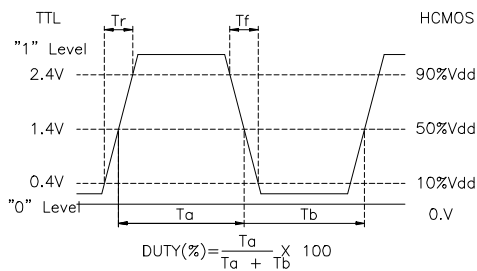
## MECHANICAL DIMENSIONS



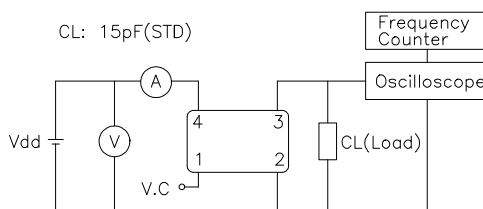
Recommended Soldering Pattern



## OUTPUT WAVEFORM



## TEST CIRCUIT



## ELECTRICAL SPECIFICATION

Frequency range	10.000KHz to 200.000MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory		
Frequency Stability vs. Temperature vs. Aging	± 10 ppm to ±50ppm ±3.0 ppm max/ year		
Temperature Range Operating Storage	See Table 2 -55°C to 105°C		
Supply Voltage	3.3V ± 5% 5.0V ± 5%		
Input Current		3.3V	5.0V
	fo ≤ 25.000MHz	15mA	20mA
	fo ≤ 50.000MHz	25mA	30mA
	fo ≤ 80.000MHz	40mA	50mA
	fo ≤ 125.000MHz	50mA	60mA
	fo ≤ 200.000MHz	60mA	80mA
Output characteristics HCMOS / TTL	HCMOS	TTL	
Logic "1"	90% Vdd min	2.4V min	
Logic "0"	10% Vdd max	0.4V min	
Load	15pF	10TTL	
Duty Cycle	40/60	40/60	
Rise & Fall	10nS max	10nS max	
Pin 1 Tri-State Input Voltage	No Connection Vh ≥ 2.0 Vdc Vi ≤ 0.8 Vdc	Enable Output Enable Output Disable Output	

## ENVIROMENTAL & MECHANICAL SPECIFICATION

Shock	MIL-STD-883C, Method 2002, Condition B
Vibration	MIL-STD-883C, Method 2007, Condition A
Solderability	MIL-STD-883C, Method 2003
Seal integrity	MIL-STD-883C, Method 1014, Condition C & A2
Marking	MIL-STD-202F, Method 215

## TABLE1

Symbol	Stability
20	± 20ppm
25	± 25ppm
30	± 30ppm
50	± 50ppm
100	±100ppm

## TABLE2

Symbol	Temp.	Symbol	Temp.
0	0°C	A	50°C
1	-10°C	B	60°C
2	-20°C	C	70°C
3	-30°C	D	75°C
4	-40°C	E	80°C
		F	85°C