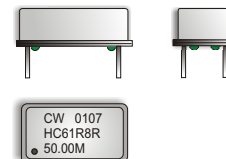


# CRYSTAL CONTROLLED OSCILLATORS

## 5.0V HCMOS/TTL COMPATIBLE 14 PIN DIL CRYSTAL CLOCK OSCILLATOR



### HC61R8R

#### ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	
Supply Voltage	(Vcc)	-0.5	-	7.0	Vdc	

#### MODEL SPECIFICATIONS:

##### MODEL HC61R8R

TABLE 2.0

Frequency Range	(Fo)	1.0	-	70	MHz	
Frequency Tolerance:		-25	-	25	ppm	1

#### OPERATING SPECIFICATIONS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Operating Temperature Range		-40	-	85	°C	
Supply Voltage	(Vdd)	4.5	5.0	5.5	Vdc	
Supply Current	1.0 to 24.999 MHz	(Icc)	-	-	25	mA
	25 to 49.999 MHz	(Icc)	-	-	45	mA
	50 to 70.000 MHz	(Icc)	-	-	60	mA

#### INPUT CHARACTERISTICS

TABLE 4.0

Enable Voltage	(Vih)	2.2	-	-	Vdc	2
Disable Voltage	(Vil)	-	-	0.8	Vdc	
Enable Time		-	-	100	nS	
Disable Time		-	-	100	nS	

#### HCMOS OUTPUT CHARACTERISTICS

TABLE 5.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	50	pF	3
Voltage	(High)	(Voh)	4.5	-	Vdc	
	(Low)	(Vol)	-	0.5	Vdc	
Current	(High)	(Ioh)	-16	-	mA	
	(Low)	(Iol)	-	16	mA	
Duty Cycle measured at 50% of Vcc		45	50	55	%	
Rise / Fall Time measured at 10% to 90%		-	4	5	nS	
Start-Up Time		-	3	10	mS	
Jitter		-	-	5	pS RMS	

#### PACKAGE CHARACTERISTICS

TABLE 6.0

Package	Hermetically sealed metal package
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#### Note:

- 1) Inclusive of calibration @ 25°C, frequency vs. temperature stability, supply voltage change, load change, shock and vibration, 10 years aging.
- 2) Oscillator output is enabled with no connection on pin 1
- 3) Output drives 10 TTL loads.

#### DESCRIPTION

The Connor-Winfield HC61R8R is a 5.0V HCMOS/TTL Compatible, Fixed Frequency Crystal Oscillator (XO) with Tri-state output. The HC61R8R is designed for use in all applications requiring a precision clock.

#### FEATURES

- 1.0 to 70 MHz
- 5.0V OPERATION
- TRI-STATE ENABLE / DISABLE FUNCTION
- OVERALL FREQUENCY TOLERANCE OF ±25ppm
- TEMPERATURE RANGE -40 to 85°C
- HERMETICALLY SEALED PACKAGE

#### ORDERING INFORMATION

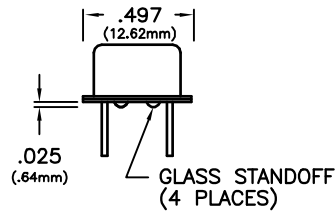
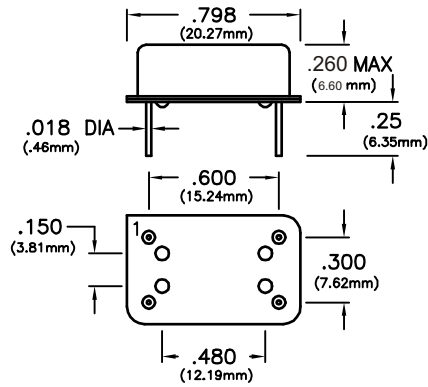
HC61R8R - 50.00 MHz

CLOCK SERIES

CENTER FREQUENCY

Specifications subject to change without notice.

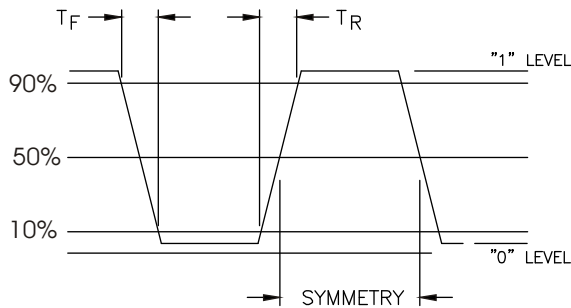
CRYSTAL CONTROLLED OSCILLATORS



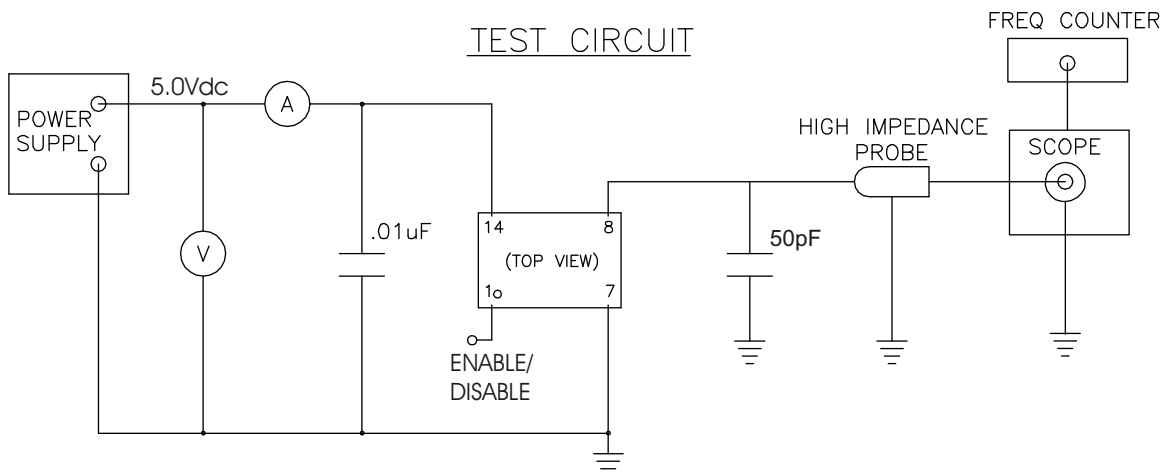
Dimensional Tolerance:  
±.005 (.127mm)  
±.02 (.508mm)

PIN	CONNECTION
1	ENABLE/DISABLE
7	GROUND
8	OUTPUT
14	Vcc

OUTPUT WAVEFORM



TEST CIRCUIT



Specifications subject to change without notice.