

CRYSTAL CONTROLLED OSCILLATORS

2.5V SURFACE MOUNT 6x3.5mm CRYSTAL CLOCK OSCILLATOR



6122

ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	
Supply Voltage	(Vcc)	-0.5	-	4.6	Vdc	

MODEL 6222

Frequency Range	(Fo)	1.8	-	50	MHz	
Frequency Tolerance:		-50	-	50	ppm	1

OPERATING SPECIFICATIONS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Operating Temperature Range		-40	-	85	°C	
Supply Voltage	(Vdd)	2.375	2.5	2.625	Vdc	
Supply Current	1.80 to 31.999 MHz	(Icc)	-	10	mA	
	32.0 to 50.0 MHz	(Icc)	-	12	mA	

INPUT CHARACTERISTICS

TABLE 4.0

Enable Voltage	(Vih)	70%Vcc	-	-	Vdc	2
Disable Voltage	(Vil)	-	-	30%Vcc	Vdc	
Enable Time		-	-	10	ms	
Disable Time		-	-	150	ns	
Output Disable Current	(Ioc)	-	-	10	uA	

LVMOS OUTPUT CHARACTERISTICS

TABLE 5.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	15	pF	
Voltage	(High)	(Voh)	0.9Vcc	-	Vdc	
	(Low)	(Vol)	-	0.1Vcc	Vdc	
Current	(High)	(Ioh)	-4	-	mA	
	(Low)	(Iol)	-	4	mA	
Duty Cycle at 50% of Vcc		45	50	55	%	
Rise / Fall Time 10% to 90%		-	-	5	ns	
Start-Up Time		-	-	10	ms	
Period Jitter		-	3	5	ps RMS	
Phase Jitter (BW=12kHz to 20MHz)		-	0.5	1	ps RMS	

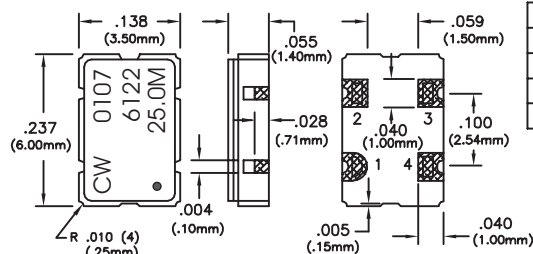
PACKAGE CHARACTERISTICS

TABLE 6.0

Package	Hermetically sealed ceramic package and metal cover
Soldering Process	RoHS compliant, lead free. See solder profile on page 2.

Note:

- Inclusive of calibration @ 25°C, frequency vs. temperature stability, supply voltage change, load change, shock and vibration, 10 years aging.
- Oscillator output is enabled with no connection on pad 1



Dimensional Tolerance: ±.008 (.20mm)

PIN	CONNECTION
1	TRI-STATE E/D
2	GROUND
3	OUTPUT
4	VDD

DESCRIPTION

The Connor-Winfield model 6122 is a 2.5V HCMOS, Surface Mount, Fixed Frequency Crystal Oscillator (XO) designed for use in all applications requiring precision clocks. This oscillator features low stand-by current (10uA) when the output is disabled. The surface mount package is designed for high-density mounting and is optimum for mass production.

FEATURES

2.5V OPERATION

1.8 to 50MHz

TEMPERATURE RANGE: 0 to 70°C

OVERALL FREQUENCY TOLERANCE: ±50ppm

TRI-STATE ENABLE/DISABLE FUNCTION

POWER SAVING FUNCTION: 10uA WHEN DISABLED

CERAMIC SURFACE MOUNT PACKAGE

TAPE AND REEL PACKAGING

RoHS COMPLIANT / LEAD FREE

ORDERING INFORMATION

6122 - 025.0M

CLOCK SERIES

CENTER FREQUENCY

Specifications subject to change without notice.

