CONNOR WINFIELD

THE CONNOR-WINFIELD CORP.

2111 COMPREHENSIVE DRIVE.
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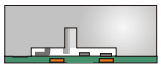
PRODUCT DATA SHEET

RoHS COMPLIANT

CRYSTAL CONTROLLED OSCILLATORS

3.3V SURFACE MOUNT LVPECL CLOCK





FPLD62T2G

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	

OPERATING SPECIFICATIONS — TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Center Frequency	(Fo)	16	-	250	MHz	
Total Frequency Tolerance		-50		50	ppm	1
Operating Temperature Range		-40	-	85	°C	
Supply Voltage	(Vcc)	3.135	3.3	3.465	Vdc	
Supply Current	(Icc)	-	-	60	mA	
Jitter (BW=10Hz to 20MHz)		-	-	5	pS RMS	
Jitter (BW=12kHz to 20MHz)		-	-	1	pS RMS	
Start Up Time		-	-	10	mS	

LVPECL OUTPUT CHARACTERISTICS — TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	50	Ohms	2
Voltage (High)	(Voh)	2.275	-	-	Vdc	
(Low)	(Vol)	-	-	1.68	Vdc	
Duty Cycle		45	50	55	%	3
Rise / Fall Time 20% to 80%		-	-	1	nS	

PACKAGE CHARACTERISTICS — TABLE 4.0

Package	Non-hermetic package consisting of an FR4 substrate with grounded metal cover.

PROCESS RECOMMENDATIONS — TABLE 5.0

Soldering Process	See solder profile page 2.
Wash	Ultrasonic cleaning is not recommended.

Notes
1) Includes initial tolerance, deviation over temperature, supply and load variations, shock, vibration and 20 years aging.
2) Output must be terminated into 50 ohms to Vcc – 2V or Thevenin equivalent.
3) Duty Cycle measured at 1.977V

DESCRIPTION

The Connor-Winfield FPLD62T2G is a fixed frequency, surface mount Crystal Controlled Oscillator (XO) designed for applications requiring low jitter and a ±50ppm overall stability. Operating at 3.3V supply voltage, the FPLD62T2G provides LVPECL Differential Outputs.

FEATURES

3.3V OPERATION

LVPECL DIFFERENTIAL OUTPUTS

LOW JITTER <1pS RMS

OVERALL FREQUENCY TOLERANCE: ±50ppm

TEMPERATURE RANGE: -40 to 85°C

SURFACE MOUNT PACKAGE

TAPE AND REEL PACKAGING

RoHS COMPLIANT / LEAD FREE

ORDERING INFORMATION

FPLD62T2G - 100.0MHz

FPLD62T2G: LV PECL CLOCK SERIES
100.0MHz: CENTER FREQUENCY

Specifications subject to change without notice.

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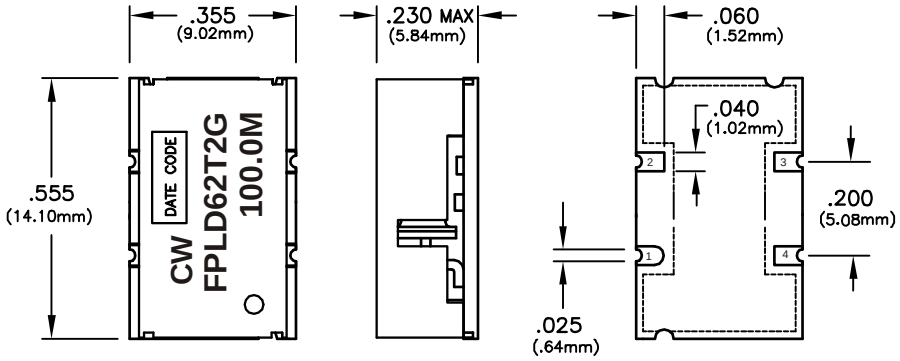
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Package Layout

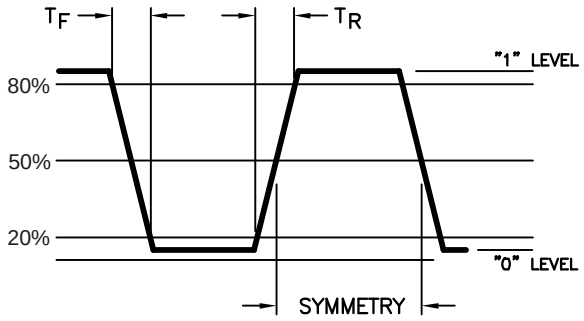


Pin Connections

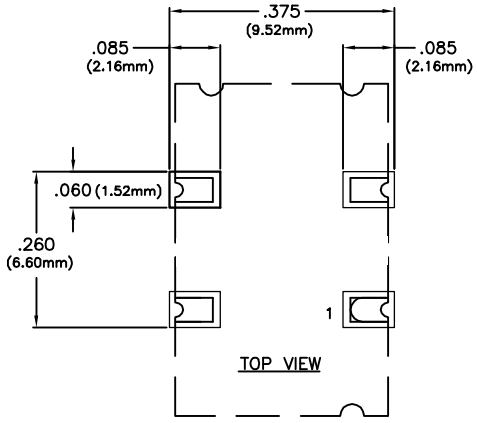
PIN	CONNECTION
1	$\overline{Q}$ OUTPUT
2	GROUND
3	Q OUTPUT
4	Vcc

Dimensional Tolerance:
±.005" (.127mm)

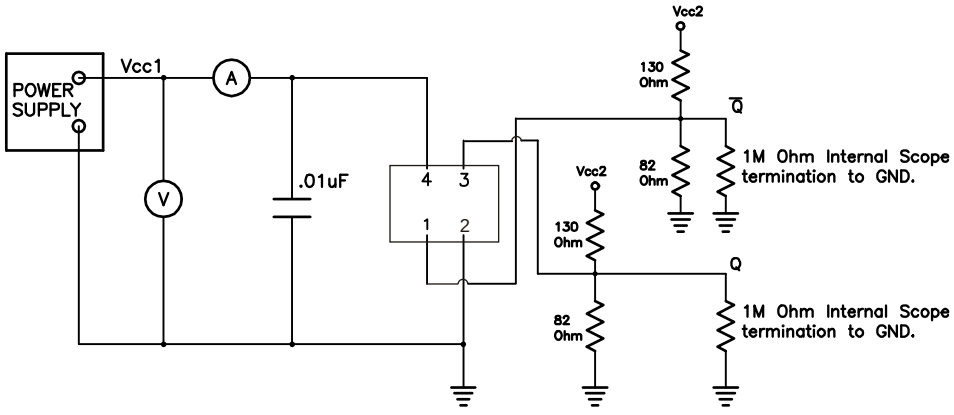
Output Waveform



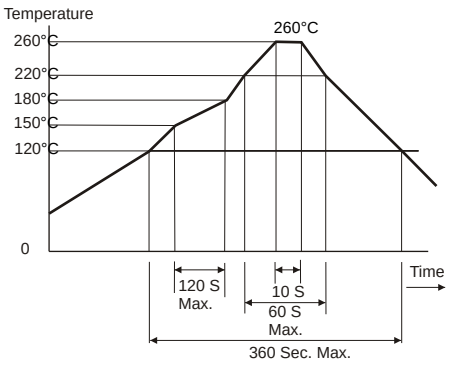
Suggested Pad Layout



Test Circuit



Solder Profile



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