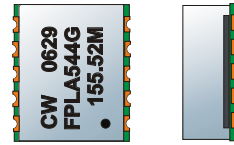


CRYSTAL CONTROLLED OSCILLATORS

SURFACE MOUNT 3.3V LVPECL CLOCK



FPLA544G

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)	44.736	-	200	MHz	
Total Frequency Tolerance		-20		20	ppm	1
Operating Temperature Range		0	-	70	°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	

INPUT CHARACTERISTICS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Disable Input Voltage (High)	(Vih)	2.275	-	-	Vdc	2
Enable Input Voltage (Low)	(Vil)	-	-	1.68	Vdc	2

LVPECL OUTPUT CHARACTERISTICS

TABLE 4.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	50	Ohms	3
Voltage (High)	(Voh)	2.275	-	-	Vdc	
(Low)	(Vol)	-	-	1.68	Vdc	
Duty Cycle		45	50	55	%	4
Rise / Fall Time 20% to 80%		-	-	1	nS	

PACKAGE CHARACTERISTICS

TABLE 5.0

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

PROCESS RECOMMENDATIONS

TABLE 6.0

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

Notes

- Includes initial tolerance, deviation over temperature, supply and load variations, shock, vibration and 10 years aging.
- When the oscillator is disabled, the true output is in a low state (Vol) and the complementary output is in the high state (Voh).
- Output must be terminated into 50 ohms to Vcc – 2V or Thevenin equivalent.
- Duty Cycle measured at 1.977V

DESCRIPTION

The Connor-Winfield FPLA544G is a fixed frequency, surface mount Crystal Controlled Oscillator (XO) designed for applications requiring low jitter and a ± 20 ppm overall stability. Operating at 3.3V supply voltage, the FPLA544G provides LVPECL Differential Outputs with enable/disable function.

FEATURES

- 3.3V OPERATION
- LVPECL DIFFERENTIAL OUTPUTS
- OVERALL FREQUENCY TOLERANCE: ± 20 PPM
- TEMPERATURE RANGE: 0 to 70°C
- LOW JITTER <1pS RMS
- ENABLE/DISABLE FUNCTION
- SURFACE MOUNT PACKAGE
- TAPE AND REEL PACKAGING
- RoHS COMPLIANT / LEAD FREE

ORDERING INFORMATION

FPLA544G - 155.52MHz

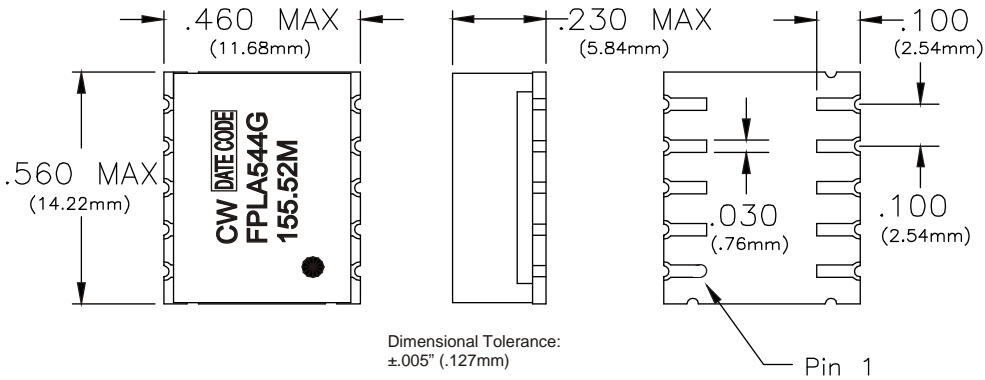
LVPECL
CLOCK
SERIES

CENTER
FREQUENCY

Specifications subject to change without notice.

CRYSTAL CONTROLLED OSCILLATORS

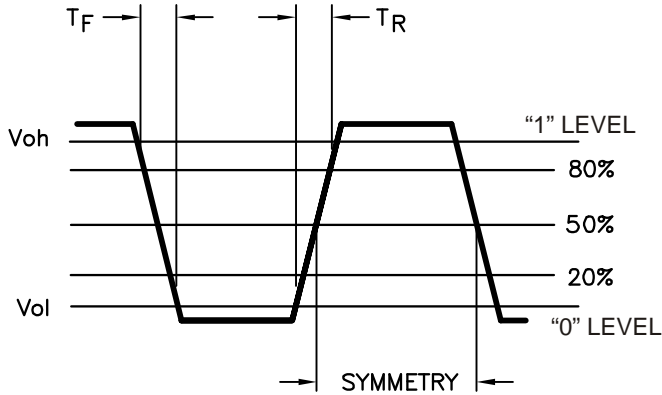
Package Layout



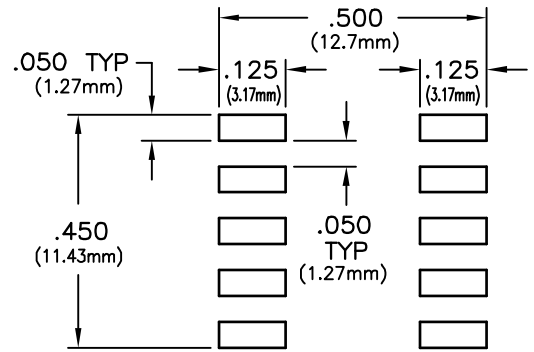
Pin Connections

Pin	Connection
1	N/C
2	Enable / Disable
3	N/C
4	Ground
5	N/C
6	Q Output
7	Q Output
8	N/C
9	Vcc
10	N/C

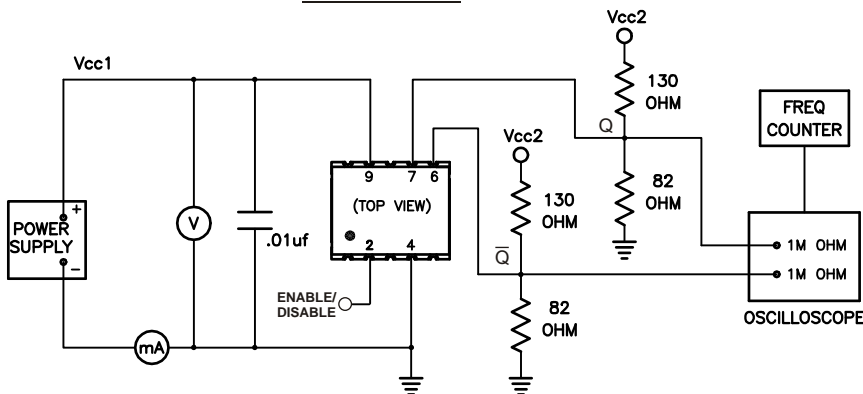
Output Waveform



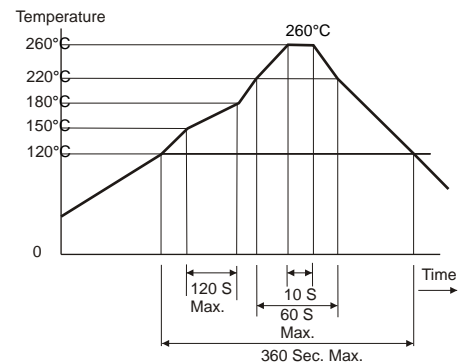
Suggested Pad Layout



Test Circuit



Solder Profile



Specifications subject to change without notice.