



CFPS-34 Oscillator

ISSUE 2; 23 JULY 2008



Delivery Options

- Please contact our sales office for current leadtimes

Description

- The CFPS-34 is a high frequency, surface mount oscillator with complementary LVPECL outputs.

Output Compatibility

- LVPECL
- Output Load 50Ω terminated to +1.3V

Output Voltage

- "0" Level VoL +1.7V max
- "1" Level VoH +2.2V min

Package Outline

- 7.5 x 5 x 1.4mm SMD

Frequency Range

- 75.0 to 170.0MHz

Frequency Stabilities

- ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage & output load variations over the operating temperature range)

Operating Temperature Ranges

- -10 to 70°C (CFPS-34)
- -40 to 85°C (CFPS-34I)

Storage Temperature Range

- -55 to 125°C

Tri-state Operation

- Logic '1' (>70% Vs) to pad 1 enables oscillator output
- Logic '0' (<30% Vs) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state
- No connection to pad 1 enables oscillator output

Phase Jitter

- 1ps rms max (12kHz - 20MHz)

Environmental

- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms)
- Vibration: MIL-STD-202F, Method 204D, Test Condition D 20G Frequency range 10-2000Hz, 4 hrs for X, Y & Z (total 12hrs)

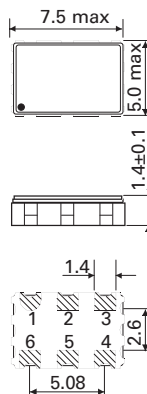
Marking includes

- Model Number
- Frequency

Minimum Order Information Required

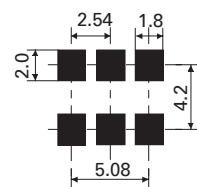
- Frequency + Model Number + Operating Temperature Code (if applicable) + Frequency Stability

Outline in mm

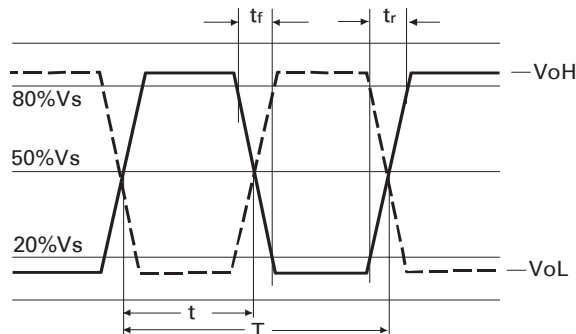


- Pad connections
1. Enable/Disable
 2. N/C
 3. GND
 4. Output 1
 5. Output 2
 6. +Vs

Solder pad layout

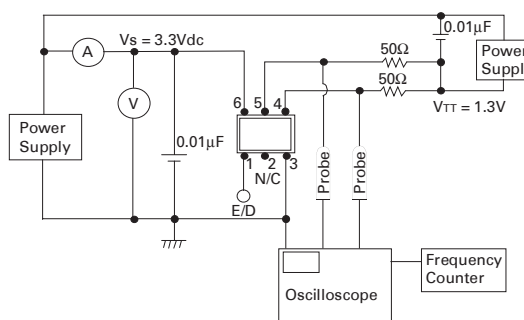


Output Waveform



$$\text{Duty cycle} = \frac{t}{T} \times 100(\%)$$

Test Circuit - LVPECL



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SURFACE MOUNT
SPXOs



Electrical Specification - maximum limiting values when measured in LVPECL test circuit

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (tr) (20% to 80%)	Fall Time (tf) (80% to 20%)	Duty Cycle	Model Number
75.0 to 170.0MHz	±25ppm*, ±50ppm, ±100ppm	3.3V±5%	60mA	1.0ns	1.0ns	40/60%	CFPS-34 CFPS-34I

Ordering Example 100.0MHz CFPS-34 I C

Frequency _____

Model No _____

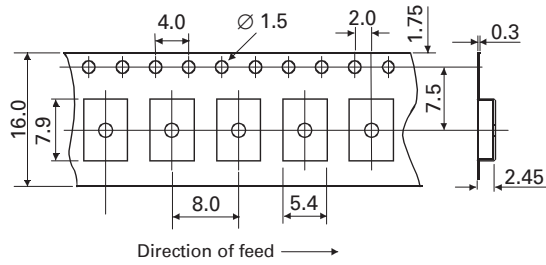
Operating Temperature Code: I = -40 to 85°C: Not applicable for -10 to 70°C _____

Frequency Stability: A = ±25ppm, B = ±50ppm, C = ±100ppm _____

*Note - Code IA, ±25ppm over -40 to 85°C is not available

SURFACE MOUNT
SPX0s

Outline in mm - Tape



Outline in mm - Reel

