# CFPS-95, -96, -97

#### **ISSUE 1; 30 JULY 1999**

## **Delivery Options**

Please contact our sales office for current leadtimes

## **Output Compatibility**

- Tri-state TTL (5.0V) (CFPS-96)
- Tri-state HCMOS (5.0V) (CFPS-95)
- Tri-state HCMOS (3.3V) (CFPS-97)

## Package Outline

 One Time Factory Programmable crystal oscillator in a SMD (surface mount device) ceramic package. Available over -10 to 70°C (CFPS-95, -96, -97) or -40 to 85°C (CFPS-95I, -96I, -97I)

## **Standard Frequency Stabilities**

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

#### **Operating Temperature Range**

- -10 to 70°C (CFPS-95,- 96, -97)
- -40 to 85°C (CFPS-95I, -96I, -97I)

#### Storage Temperature Range

■ -55 to 125°C

#### **Tri-state Operation**

- Logic '1' to pad 1 enables oscillator output, 2.2V min
- Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state, 0.8V max
- No connection to pad 1 enables oscillator output

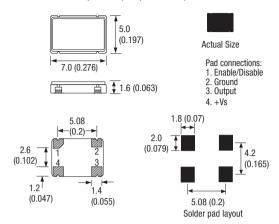
## Marking

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

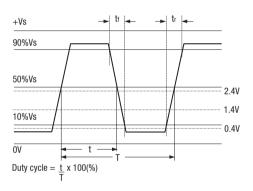
#### Minimum Order Information Required

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

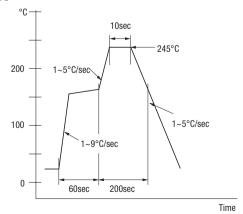
#### Outline in mm (inches) - (scale 2:1)



## **Output Waveform**



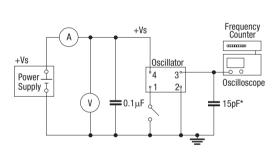
#### **Typical Solder Condition - Infrared Reflow**



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

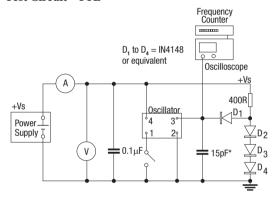
Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Rise Time (t <sub>r</sub> )	Fall Time (t <sub>f</sub> )	<b>Duty Cycle</b>	Model Number
1.0 to 100.0MHz	±50ppm, ±100ppm	5.0V±0.5V	45mA	4ns	4ns	45/55%	CFPS-95, -96, -951, -961
		3.3V±0.3V	25mA	4ns	4ns	45/55%	CFPS-97, -97I
>100.0 to 125.0MHz	±50ppm, ±100ppm	5.0V±0.5V	45mA	4ns	4ns	45/55%	CFPS-95, -96, -951, -961
Ordering Example 24.0MHz CFPS-96I C							
Frequency — Model No — Operating Temperature Code: I= –40 to 85°C Not applicable for –10 to 70°C — Frequency Stability: B = ±50ppm (not available over –40 to 85°C); C = ±100ppm							

#### **Test Circuit - HCMOS**



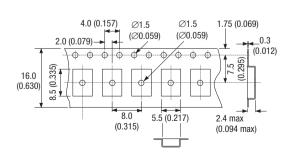
\* Inclusive of jigging & equipment capacitance

#### Test Circuit - TTL



\*Inclusive of jigging & equipment capacitance

## Outline in mm (inches) - Tape



## Outline in mm (inches) - Reel (scale 1:8)

