# CFPS-72, -73 Semtech Reference - Stratum 4

#### **ISSUE 5; 19 OCTOBER 2004**

#### **Delivery Options**

 Common frequencies are available from stock. Please see stock list or contact sales office

### **Output Compatibility**

- Tri-state HCMOS/TTL (5.0V) (CFPS-72), Load 15pF max
- Tri-state HCMOS (3.3V) (CFPS-73), Load 15pF max

### **Package Outline**

7.0 x 5.0mm SMD Ceramic Package.
 Available over 0 to 70°C (CFPS-72, -73) or -40 to 85°C (CFPS-72I, -73I)

# **Standard Frequency Stabilities**

 ±20ppm, ±25ppm, ±50ppm, ±100ppm (inclusive of supply voltage & output load variations over the operating temperature range)

#### **Operating Temperature Range**

- 0 to 70°C (CFPS-72, -73)
- -40 to 85°C (CFPS-72I, -73I)

#### **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

### **Solder Conditions**

 For typical soldering conditions, please see the relevant pages in Applications Notes

# 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
- Please refer to our programmable oscillator chapter for fast make products

#### Outline in mm



1.8±0.2

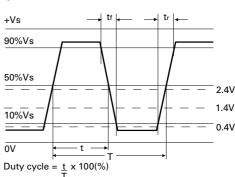


Pad Connections

- 1. N/C or Enable/Disable
- 2. GND
- 3. Output
- 4. +Vs



**Output Waveform** 



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

Frequency	Frequency	Supply Voltage	Supply Current	Rise Time(tr)	Fall Time (tf)	<b>Duty Cycle</b>	Model Number
Range	Stability						
1.25 to 35.0MHz	±20ppm, ±25ppm, ±50ppm, ±100ppm	3.3V	15mA	6ns	6ns	40/60%	CFPS-73, CFPS-731
>35.0 to 70.0MHz			30mA	6ns	6ns		
>70.0 to 106.25MHz			40mA	6ns	6ns		
>106.25 to 120.0MHz			40mA	6ns	6ns		
>120.0 to 125.0MHz			40mA	6ns	6ns		
>125.0 to 160MHz			40mA	6ns	6ns		
1.25 to 20.0MHz	±25ppm, ±50ppm ±100ppm	5.0V	20mA	6ns	6ns		
>20.0 to 35.0MHz			30mA	6ns	6ns		
>35.0 to 70.0MHz			50mA	6ns	6ns		CFPS-72,
>70.0 TO 100.0MHz			70mA	6ns	6ns		CFPS-72I
>100.0 to 125.0MHz			70mA	6ns	6ns		
>125.0 to 160.0MHz			70mA	6ns	6ns		

Ordering Example

24.0MHz

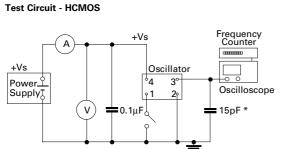
CFPS-73!

Frequency

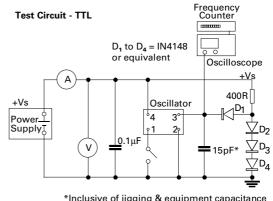
Model No

Operating Temperature Code: I = -40 to 85°C; Not applicable for 0 to 70°C

Frequency Stability: A = ±25ppm; B = ±50ppm; C = ±100ppm; G = ±20ppm

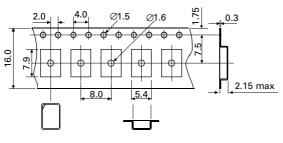


st Inclusive of jigging & equipment capacitance



\*Inclusive of jigging & equipment capacitance Note: CFPS-72, 72I only

### Outline in mm - Tape



### Outline in mm - Reel

