### **ISSUE 1; 14 OCTOBER 1999**

### **Delivery Options**

 Common frequencies are available from stock. Please see p207 for details

## **Output Compatibility**

Tri-state HCMOS

### Description

 CFPV-41, -42, -43, -44 are surface mount voltage controlled crystal oscillators providing a high degree of frequency stability over a wide temperature range. It is particularly suited to applications where space is at a premium

### Package Outline

• 7.5 × 5.0 × 1.9mm SMD (surface mount device)

### **Standard Frequencies**

 2.048MHz, 4.096MHz, 8.192MHz, 10.0MHz, 12.288MHz, 16.384MHz, 19.44MHz, 20.48MHz, 24.576MHz, 26.0MHz, 28.6363MHz, 32.768MHz, 34.368MHz, 34.816MHz, 38.880MHz, 40.960MHz, 44.7360MHz, 49.152MHz, 50.0MHz, 51.84MHz

## **Standard Frequency Stabilities**

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

### **Operating Temperature Range**

■ -10 to 70°C

### Storage Temperature Range

■ -40 to 85°C

## Voltage Control Pin 1

- 2.5V±2.0V (CFPV-41, -43)
- 1.65V±1.5V (CFPV-42, -44)

### Linearity

<±10%</p>

## **Modulation Bandwidth**

■ >20kHz

# Start up Time

10mS max.

### Marking

- Model number
- Frequency Stability Code
- Frequency

### **Minimum Order Information Required**

Frequency + Model Number + Frequency Stability



## **Output Waveform - HCMOS**



## Test Circuit



\*Inclusive of jigging & equipment capacitance

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	Output Frequency Change	Rise Time (t <sub>r</sub> )	Fall Time (t <sub>f</sub> )	Duty Cycle	Model Number
1.0 to 18.0MHz	±25ppm, ±50ppm, ±100ppm	5V±0.25V	20mA	±50ppm min	5ns	5ns	40/60%	CFPV-41
				±100ppm min				CFPV-43
		3.3V±0.16V	15mA	±50ppm min				CFPV-42
				±100ppm min				CFPV-44
>18.0 to 30.0MHz	±25ppm, ±50ppm, ±100ppm	5V±0.25V	30mA	±50ppm min	5ns	5ns	40/60%	CFPV-41
				±100ppm min				CFPV-43
		3.3V±0.16V	15mA	±50ppm min				CFPV-42
				±100ppm min				CFPV-44
>30.0 to 36.0MHz	±25ppm, ±50ppm, ±100ppm	5V±0.25V	30mA	±50ppm min	5ns	5ns	40/60%	CFPV-41
				±100ppm min				CFPV-43
		3.3V±0.16V	25mA	±50ppm min				CFPV-42
				±100ppm min				CFPV-44
>36.0 to 45.0MHz	±25ppm, ±50ppm, ±100ppm	5V±0.25V	40mA	±50ppm min	5ns	5ns	40/60%	CFPV-41
				±100ppm min				CFPV-43
		3.3V±0.16V	25mA	±50ppm min				CFPV-42
				±100ppm min				CFPV-44
>45.0 to 52.0MHz	±25ppm, ±50ppm, ±100ppm	5V±0.25V	40mA	±50ppm min	5ns	5ns	40/60%	CFPV-41
				±100ppm min				CFPV-43
Ordering Example  13.0MHz  CFPV-43  B    Frequency								

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

Outline in mm (inches) - Tape





