



ISSUE 7; March 2012 - RoHS 2011/65/EU

Description

- Standard 7 x 5mm Voltage Controlled Crystal Oscillator
- Ceramic package with a seam sealed metal lid, hermetically sealed
- For pulling of ± 50 ppm please see our CFPV-42 range
- For pulling of ± 100 ppm min APR please see our CFPV-45 range
- For a 5.0V version, please see our CFPV-43 range

Frequency Range

- Frequency 1.00 to 125.00MHz

Supply Voltage

- Voltage 3.3V ± 0.3 V

Output Compatibility & Load

- Output Compatibility HCMOS
- Drive Capability 15pF max

Frequency Stabilities

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

Input Impedance

- Input Impedance 1-80MHz 100k Ω typ,
>80-125MHz 5M Ω typ

Voltage Control

- Voltage Control 1.65V ± 1.5 V

Pullability

- Pulling ± 100 ppm min

Operating Temperature Ranges

- 10 to 70°C
- 40 to 85°C

Electrical Parameters

- Linearity: Positive $\pm 10\%$ max
- Modulation Bandwidth: 20kHz min
- Start-Up Time: 10ms max

Output Details

- Logic '1' (>70%VS) to pad 2 enables oscillator output
- Logic '0' (<30%VS) to pad 2 disables oscillator output; when disabled the oscillator output goes to the high impedance state
- No connection pad 2 enables oscillator output

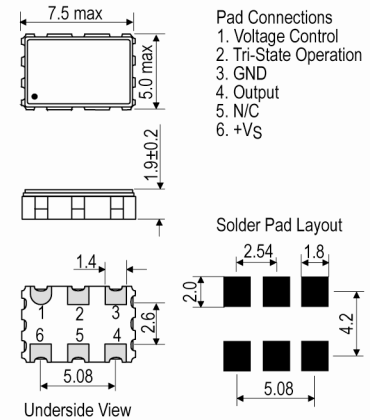
Noise Parameter

- Phase Jitter: 20MHz max 1ps rms (12kHz - 1MHz)

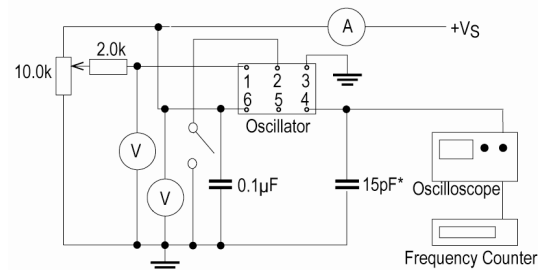
Environmental Parameters

- Shock: MIL-STD-202F, Method 213B (1000G, 0.5ms, 1/2 sine)
- Storage Temperature Range: -40 to 85°C
- Vibration: Sinewave, frequency range 10-55Hz, amplitude 1.52mm, 2hrs in X, Y, Z axes (total 6 hrs)

Outline (mm)

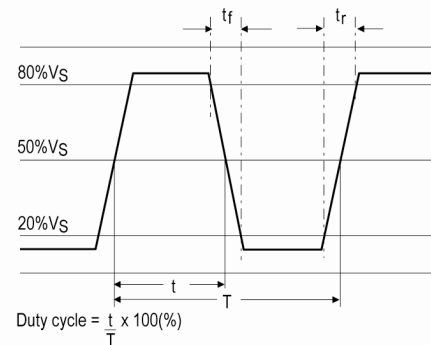


Test Circuit



*Inclusive of jiggling and equipment capacitance

Output Waveform



Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18
USA: +1 (0) 408 455 2426

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com



Ordering Information (*minimum required)

- Example
20.0MHz CFPV-44
HCMOS ±50ppm -40 to 85C 3.3V ±100ppm min
- Frequency*
Model*
Output
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Supply Voltage
Pullability
(*minimum required)

Packing Details

- Pack Style: **Bulk** Loose in bulk pack
Pack Size 100
- Pack Style: **Reel** Tape and reel in accordance with EIA-481-D
Pack Size 1,000
- Alternative packing options available

Electrical Specification - maximum limiting values 3.3V ±0.3V

Frequency Range	Temp Range	Stability	Pullability	Supply Current	Rise & Fall (20 to 80%)	Duty Cycle %
1.00 to 30.00MHz	-10 to 70°C	±25ppm	±100ppm min	15.0mA	5ns	40/60%
	-40 to 85°C	±25ppm	±100ppm min	15.0mA	5ns	40/60%
30.00 to 52.00MHz	-10 to 70°C	±25ppm	±100ppm min	25.0mA	5ns	40/60%
	-40 to 85°C	±25ppm	±100ppm min	25.0mA	5ns	40/60%
52.00 to 125.00MHz	-10 to 70°C	±50ppm	±100ppm min	35.0mA	5ns	40/60%
	-40 to 85°C	±50ppm	±100ppm min	35.0mA	5ns	40/60%

This document was correct at the time of printing; please contact your local sales office for the latest version

Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18
USA: +1 (0) 408 455 2426

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com