

ISSUE 11; June 2016

Description

- PLL based, one time only factory programmable (for a fast lead time) crystal oscillator in a hermetically sealed ceramic package with a metal lid.
- This model is not approved for on-board avionics applications; in such instances our 'CFPP-72 AVIATION' version should be specified.
- See CFPS-72 for standard crystal oscillator alternative.



Frequency Parameters

- Frequency 1.0MHz to 150.0MHz
- Frequency Stability $\pm 25.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 5\text{ppm}$ max in 1st year @ 25°C

Electrical Parameters

- Supply Voltage 5.0V $\pm 0.5\text{V}$

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

Output Details

- Output Compatibility CMOS
- Logic '1' to pad 1 enables oscillator output
Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state
No connection to pad 1 enables oscillator output

| Drive Capability | |
|---------------------|----------|
| 0.0MHz to 66.0MHz | 50pF max |
| 66.0MHz to 150.0MHz | 25pF max |

Noise Parameters

- Jitter pk-pk:
1 to 33MHz 250ps max
>33MHz 175ps max
- Jitter pk-pk:
1 to 33MHz 100ps typ
>33MHz 75ps typ

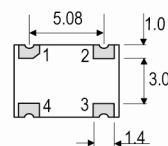
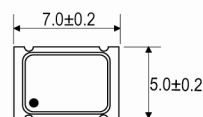
Environmental Parameters

- Storage Temperature Range: -55 to 125°C

Ordering Information

- Frequency*
- Model*
- Output Compatibility
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
- Example
20.0MHz CFPP-72
CMOS $\pm 50\text{ppm}$ -40 to 85C 5.0V

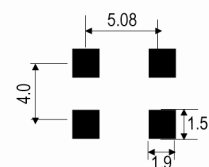
Outline (mm)



Underside View

- Pad Connections
1. N/C or Tri-State
 2. GND
 3. Output
 4. +Vs

Solder Pad Layout



Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

France: 0800 901 383
USA: +1.760.318.2824

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

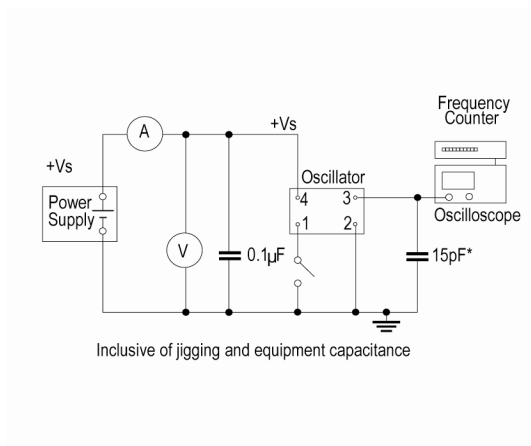
Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

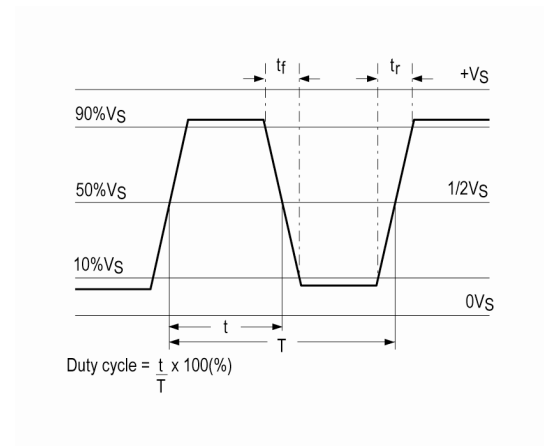
Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 1
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 1
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Test Circuit



Wave Form



Electrical Specification - maximum limiting values 5.0V ±0.5V

| Frequency Min | Frequency Max | Temperature Range | Stability (Min) | Current Draw | Rise and Fall Time | Duty Cycle |
|---------------|---------------|----------------------|-----------------|--------------|--------------------|------------------|
| | | °C | ppm | mA | ns | % |
| 1.0MHz | 40.0MHz | 0 to 70 -40 to 85 | ±25.0 ±25.0 | 45 45 | 4 4 | 45/55% 45/55% |
| 40.000001MHz | 66.0MHz | 0 to 70 -40 to 85 | ±25.0 ±25.0 | 45 45 | 4 4 | 45/55% 45/55% |
| 66.000001MHz | 100.0MHz | 0 to 70 -40 to 85 | ±25.0 ±25.0 | 45 45 | 4 4 | 40/60% 40/60% |
| 100.000001MHz | 133.0MHz | 0 to 70 -40 to 85 | ±25.0 ±25.0 | 45 45 | 4 4 | 40/60% 40/60% |
| 133.000001MHz | 150.0MHz | 0 to 70 -40 to 85 | ±25.0 ±25.0 | 60 60 | 4 4 | 40/60% 40/60% |

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Sales Office Contact Details:

UK: +44 (0)1460 270200
 Germany: 0800 1808 443

France: 0800 901 383
 USA: +1.760.318.2824

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 Web: www.iqdfrequencyproducts.com