

ISSUE 7; April 2016

### Description

- Specifically designed and approved for use with Zarlink chipsets for Stratum 4 applications.  
±20ppm all causes over 15 years crystal oscillators.  
Ceramic package with a seam sealed metal lid, hermetically sealed.  
Please see our CFPS-73 for a standard 7x5mm oscillators.



### Frequency Parameters

- Frequency: 12.8MHz to 77.76MHz
- Frequency Stability: ±20.00ppm
- Frequency Stability is all causes over 15 years inclusive of frequency tolerance, supply voltage variation, load variation and ageing.
- Developed Frequencies: 12.80MHz, 19.440MHz, 20.0MHz, 20.480MHz, 27.0MHz, 40.0MHz, 44.23220MHz, 44.621770MHz, 64.0MHz & 77.760MHz.
- Note: Frequencies between 1.0MHz and 100.0MHz will be considered, please contact an IQD Sales Office.

### Electrical Parameters

- Supply Voltage: 3.3V ±1%

### Operating Temperature Ranges

- 0 to 70°C

### Output Details

- Output Compatibility: HCMOS
- Drive Capability: 15pF

### Output Control

- Logic '1' to pad 1 enables oscillator output, 2.5V min.  
Logic '0' to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state, 0.5V max.  
No connection to pad 1 enables oscillator output.

### Environmental Parameters

- Storage Temperature Range: -55 to 125°C

### Manufacturing Details

- Maximum Process Temperature: 260°C (10secs max)

### Ordering Information

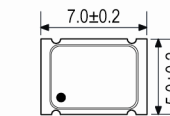
- Frequency\*  
Model\*  
Output  
Frequency Stability  
Operating Temperature Range  
Supply Voltage  
(\*minimum required)
- Example  
20.0MHz CFPS-74  
HCMOS ±20ppm All Causes 15yrs 0 to 70C 3.3V

### Compliance

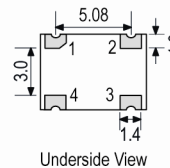
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



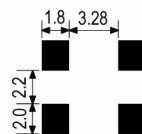
### Outline (mm)



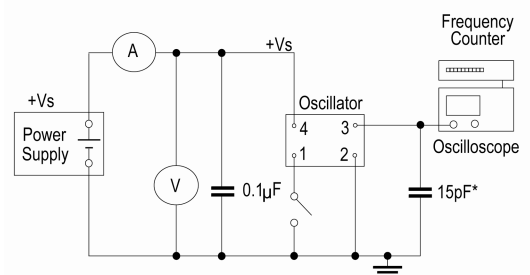
- Pad Connections
- N/C or Tri-State Operation
  - GND
  - Output
  - +Vs



### Solder Pad Layout



### Test Circuit



\*Inclusive of jigging and equipment capacitance

### Sales Office Contact Details:

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USA: +1.760.318.2824

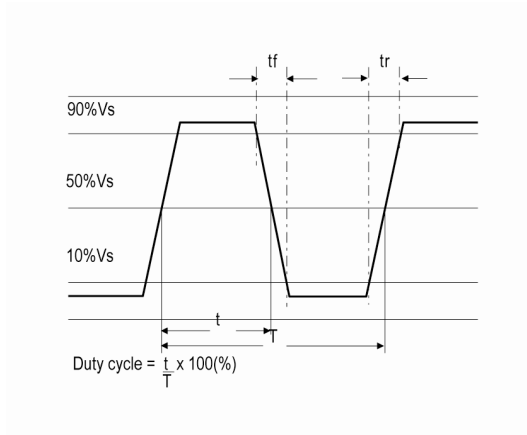
Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

**Packaging Details**

- Pack Style: Cutt      In tape, cut from reel  
Pack Size: 1
- Pack Style: Bulk      Loose in bulk pack  
Pack Size: 100
- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000

**Wave Form**



**Electrical Specification - maximum limiting values 3.30V ±1%**

| Frequency   | Temperature Range | Stability | Current Draw | Rise and Fall Time | Duty Cycle |
|-------------|-------------------|-----------|--------------|--------------------|------------|
|             | °C                | ppm       | mA           | ns                 | %          |
| 12.8MHz     | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 19.44MHz    | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 20.0MHz     | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 20.48MHz    | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 27.0MHz     | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 40.0MHz     | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 44.2322MHz  | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 44.62177MHz | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 64.0MHz     | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |
| 77.76MHz    | 0 to 70           | ±20.00    | 40           | 6                  | 45/55      |

*This document was correct at the time of printing; please contact your local sales office for the latest version.*  
[Click to view latest version on our website.](#)

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