

ISSUE 5; March 2020

### Description

- A 3.3V standard 2.5 x 2mm crystal oscillator in a ceramic package with a hermetically seam sealed metal lid  
For a low phase noise version of this package please see our CFPS-115 series  
For Fast Make capability please see our CFPP-56 series programmable oscillators for the nearest equivalent model



### Frequency Parameters

- Frequency 750.0kHz to 50.0MHz
- Frequency Stability  $\pm 30.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing  $\pm 3\text{ppm}$  max per year

### Electrical Parameters

- Supply Voltage 3.3V  $\pm 5\%$

### Operating Temperature Ranges

- 20 to 70°C
- 40 to 85°C

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Tri-State Operation:  
Logic '1' ( $>80\%V_S$ ) to pad 1 enables oscillator output  
Logic '0' ( $<20\%V_S$ ) 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

### Environmental Parameters

- Storage Temperature Range: -55 to 100°C
- Drop: 100cm drop (3 times) onto hard wooden board
- Vibration: 10Hz-36Hz, 1.5mm amplitude, 36Hz-55Hz, 4G sweep time 1min/oct, 2hrs in 3 mutually perpendicular planes

### Manufacturing Details

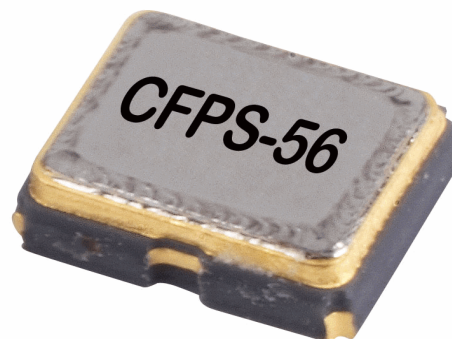
- RoHS Terminations NiAu
- RoHS Reflow 260degC 10s

### Ordering Information

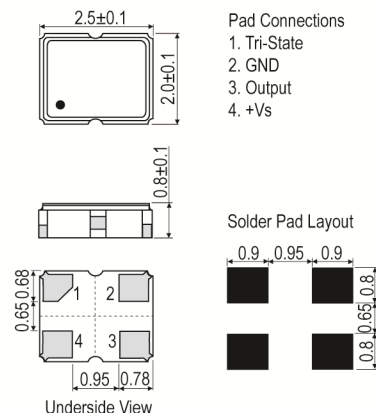
- Frequency\*
- Model\*
- Output
- Frequency Stability\*
- Operating Temperature Range\*
- Supply Voltage (\*minimum required)
- Example  
10.0MHz CFPS-56  
CMOS  $\pm 50\text{ppm}$  -20 to 70C 3.3V

### Compliance

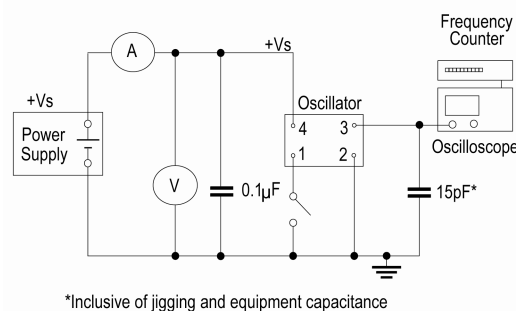
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



### Outline (mm)



### Test Circuit



### Sales Office Contact Details:

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Germany: 0800 1808 443

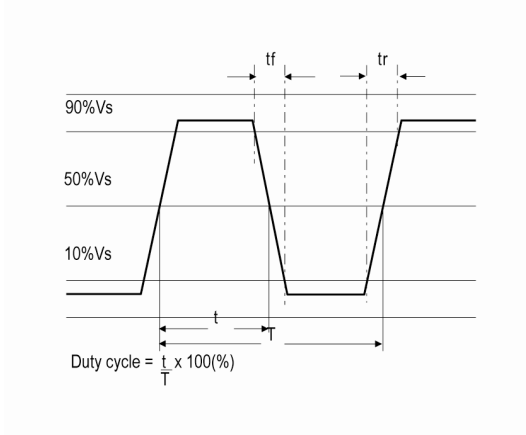
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**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
     Pack Size: 3,000
- Pack Style: Cutt      In tape, cut from a reel  
     Pack Size: 100

**Wave Form**



**Electrical Specification - maximum limiting values 3.3V ±5%**

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
750.0kHz	19.999999MHz	-20 to 70 -40 to 85	±30.0 ±30.0	6 6	10 10	45/55% 45/55%
20.0MHz	39.999999MHz	-20 to 70 -40 to 85	±30.0 ±30.0	7 7	10 10	45/55% 45/55%
40.0MHz	50.0MHz	-20 to 70 -40 to 85	±30.0 ±30.0	8 8	10 10	45/55% 45/55%

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