

### Description

- Standard 7.0 x 5.0mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Model CFPS-72
- Model Issue number 16

### Frequency Parameters

- Frequency 20.0MHz
- Frequency Stability  $\pm 50.00$ ppm
- Operating Temperature Range 0.00 to 70.00°C
- Ageing  $\pm 5$ ppm per year max

### Electrical Parameters

- Supply Voltage 5.0V  $\pm 10\%$
- Current Draw 35.000mA max
- Note: parameters are referenced to 15pF load

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF typ, 30pF max
- Rise and Fall Time 10.0ns max
- Duty Cycle 40/60 max
- Start up time: 10ms max, 1.1ms typ to 90% of final amplitude (under ideal conditions @25°C).

### Output Control

- Standby Operation:  
Logic '1' (>70% Vs) to pad 1 enables oscillator output.  
Logic '0' (<30% Vs) to pad 1 disables oscillator output; the oscillator output goes to the high impedance state.  
No connection to pad 1 enables oscillator output.  
Standby Current: 10µA max, 2.3µA typ @25°C.

### Environmental Parameters

- Shock: Half Sine shock pulse with peak acceleration 500g; Pulse duration: 0.3ms
- Vibration: MIL-STD-202 Method 204. 5g for 20 minutes, 12 cycles in each of the 3 orientations, 10 - 2000 Hz. As per Table 11 of AEC-Q200.
- Storage Temperature Range: -55 to 125°C

### Manufacturing Details

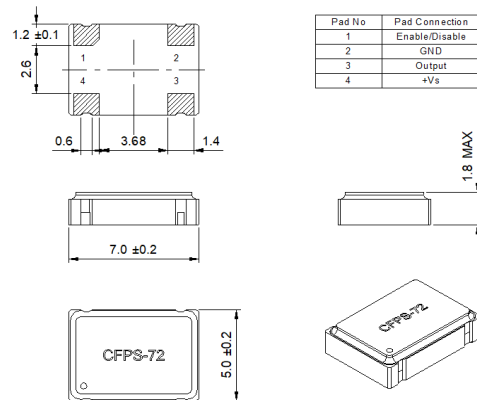
- RoHS Terminations NiAu
- RoHS Reflow Temp 260°C 10s max

### Compliance

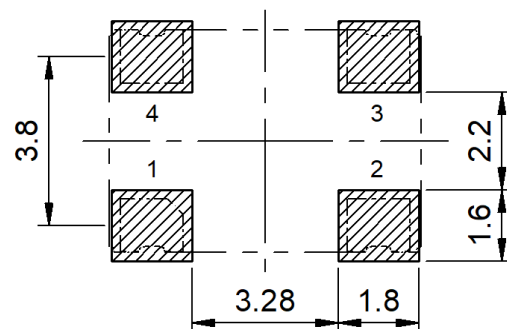
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



### Outline (mm)



### Recommended Solder Pad Layout



### CONTACT INFORMATION:

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### Packaging Details

- Tape & reel in accordance with EIA-481  
Quantities below the standard reel size to be supplied on cut tape.  
Standard Quantity: 1,000 Pieces

### USEFUL LINKS

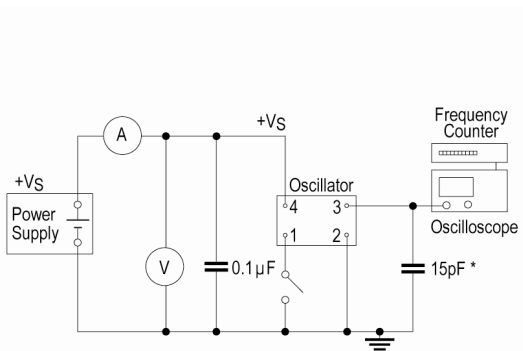
**Toolbox:**

[www.we-online.com/toolbox](http://www.we-online.com/toolbox)

**Product Catalog:**

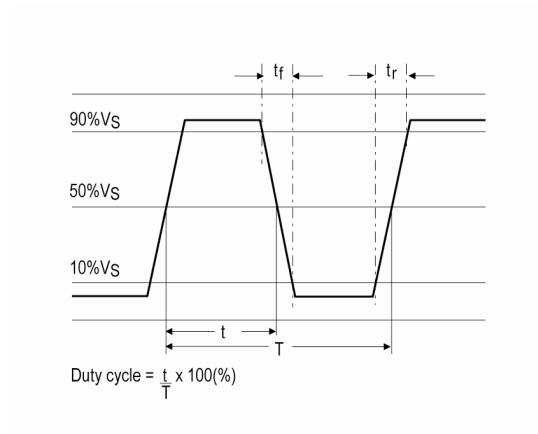
[www.we-online.com/products](http://www.we-online.com/products)

### Test Circuit



\* Inclusive of jigging and equipment capacitance

### Waveform



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