

## Customer Part:



### Description

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Model: CFPS-72
- Model Issue number: 14

### Frequency Parameters

- Frequency: 20.0MHz
- Frequency Stability:  $\pm 50.00\text{ppm}$
- Operating Temperature Range: 0.00 to 70.00°C
- Ageing:  $\pm 3\text{ppm}$  per year max

### Electrical Parameters

- Supply Voltage: 5.0V  $\pm 10\%$
- Current Draw: 20.000mA
- Note: parameters are referenced to 15pF load

### Output Details

- Output Compatibility: HCMOS/TTL
- Drive Capability: 15pF std, 50pF max
- Rise and Fall Time: 10.0ns max
- Duty Cycle: 45/55%
- 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

### Noise Parameters

- RMS Phase Jitter: 350fs typical

### Environmental Parameters

- Shock: MIL-STD-202, Method 213, Condition E.
- Vibration: MIL-STD-883, Method 2007, Condition A.
- Storage Temperature Range: -55 to 125°

### Manufacturing Details

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

### Compliance

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

### Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Alternative packing option available



### Outline (mm)



### Test Circuit



\* Inclusive of jigging and equipment capacitance

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Customer Part:

Wave Form



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