

## 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: 50.0MHz
- Frequency Stability:  $\pm 50.00\text{ppm}$
- Operating Temperature Range:  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing:  $\pm 3\text{ppm}$  per year max

### Electrical Parameters

- Supply Voltage:  $5.0\text{V} \pm 10\%$
- Current Draw:  $50.000\text{mA}$
- Note: parameters are referenced to  $15\text{pF}$  load

### Output Details

- Output Compatibility: HCMOS/TTL
- Drive Capability:  $15\text{pF}$  std,  $50\text{pF}$  max
- Rise and Fall Time:  $6.0\text{ns}$  max
- Duty Cycle: 45/55%
- Start up time:  $10\text{ms}$  max  
 $1.1\text{ms}$  typ to 90% of final amplitude (under ideal conditions @  $25^\circ\text{C}$ )

### 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:  $10\mu\text{A}$  max,  $2.3\mu\text{A}$  typ @  $25^\circ\text{C}$

### Noise Parameters

- RMS Phase Jitter:  $350\text{fs}$  typical

### Environmental Parameters

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

### Manufacturing Details

- RoHS Terminations: NiAu
- RoHS Reflow Temp:  $260^\circ\text{C}$  10s

### Compliance

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

### Packaging Details

- Pack Style: Bulk Loose in bulk pack  
 Pack Size: 100
- 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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