

**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 4.0MHz
- 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  $20.000\text{mA}$
- 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  $10.0\text{ns}$  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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