

**Customer Part:**

**Description**

- Standard 7 x 5mm crystal oscillator in a ceramic package with a seam sealed metal lid, hermetically sealed.
- Model CFPS-73
- Model Issue number 14

**Frequency Parameters**

- Frequency 8.0MHz
- 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  $3.3\text{V} \pm 10\%$
- Current Draw 7.000mA
- Note: parameters are referenced to 15pF load

**Output Details**

- Output Compatibility HCMOS
- Drive Capability 15pF std, 50pF max
- Rise and Fall Time 10.0ns max
- Duty Cycle 45/55
- Start up time: 10ms max.  
0.9ms 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, 0.9 $\mu\text{A}$  typ @  $25^\circ\text{C}$

**Noise Parameters**

- Phase Noise @125MHz (typical):  
10Hz  $-54\text{dBc}$   
100Hz  $-92\text{dBc}$   
1kHz  $-130\text{dBc}$   
10kHz  $-149\text{dBc}$   
100kHz  $-159\text{dBc}$   
1MHz  $-163\text{dBc}$
- RMS Phase Jitter @125MHz: 52fs typical

**Environmental Parameters**

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

**Manufacturing Details**

- RoHS Terminations NiAu
- RoHS Reflow Temp 260degC 10s


**Outline (mm)**

**Test Circuit**


\* Inclusive of jigging and equipment capacitance

**Sales Office Contact Details:**

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**Customer Part:**

**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*

**Wave Form**



**Phase Noise / Jitter**



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