

**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 40.0MHz
- Frequency Stability  $\pm 100.00\text{ppm}$
- 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 20.000mA
- 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°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, 0.9µA typ @ 25°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:**

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

**Customer Part:**

**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*

**Wave Form**



**Phase Noise / Jitter**



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UK: +44 (0)1460 270200  
 Germany: 0800 1808 443

France: 0800 901 383  
 USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
 Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)