

**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 20.0MHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range 0.00 to 70.00°C
- Ageing ±3ppm per year max

**Electrical Parameters**

- Supply Voltage 3.3V ±10%
- Current Draw 12.000mA
- 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 -54dBc  
100Hz -92dBc  
1kHz -130dBc  
10kHz -149dBc  
100kHz -159dBc  
1MHz -163dBc
- RMS Phase Jitter @125MHz: 52fs typical

**Environmental Parameters**

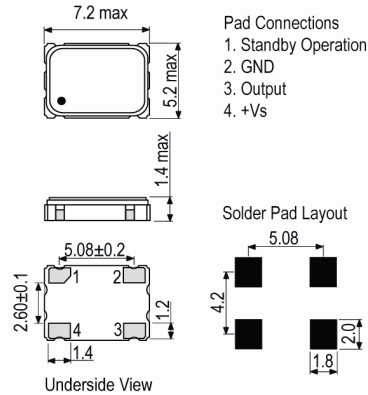
- Shock: MIL-STD-202, Method 213, Condition E
- Vibration: MIL-STD-883, Method 2007, Condition A
- Storage Temperature Range: -55 to 125°C

**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: 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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