

**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  $\pm 50.00\text{ppm}$
- Operating Temperature Range 0.00 to 70.00°C
- Ageing  $\pm 3\text{ppm per year max}$

**Electrical Parameters**

- Supply Voltage  $3.3\text{V} \pm 10\%$
- 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**

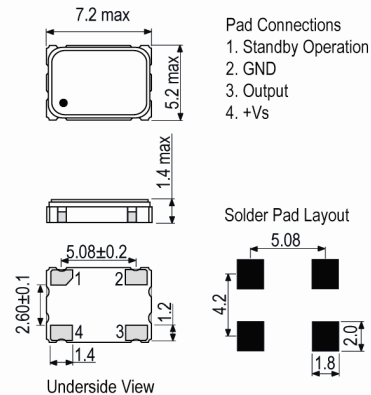
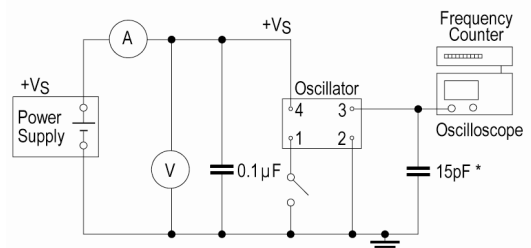
- Phase Noise @125MHz (typical):  
10Hz -54dBc  
100Hz -92dBc  
1kHz -130dBc  
10kHz -149dBc  
100kHz -159dBc  
1MHz -163dBc
- RMS Phase Jitter @125MHz: 52fs typical

**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: Bulk      Loose in bulk pack  
Pack Size: 100
- *Alternative packing option available*

**Wave Form**



**Phase Noise / Jitter**



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