

## 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 **-40.00 to 85.00°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: Bulk      Loose in bulk pack  
 Pack Size: 100
- *Alternative packing option available*

**Wave Form**



**Phase Noise / Jitter**



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