

## Customer Part:



### Description

- 32.768kHz output crystal oscillator in a ceramic package, hermetically sealed with a seam sealed metal lid. Suitable for real time clock applications.
- Model CFPS-102
- Model Issue number 5

### Frequency Parameters

- Frequency 32.7680kHz
- Frequency Stability  $\pm 25.00$ ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing  $\pm 3$ ppm max per year

### Electrical Parameters

- Supply Voltage 1.8V  $\pm 5\%$
- Current Draw 1.500mA

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 50.0ns max
- Duty Cycle 40/60%

### Output Control

- Standby Operation:  
Logic '1' (>70% VS) to pad 1 enables oscillator output  
Logic '0' (<30% VS) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state  
No connection to pad 1 enables oscillator output.
- Start-up Time: 35ms max  
2ms typ to 90% of final amplitude (under ideal conditions @ 25°C)
- Standby Current: 20 $\mu$ A max, 1.7 $\mu$ A typ @ 25°C

### Environmental Parameters

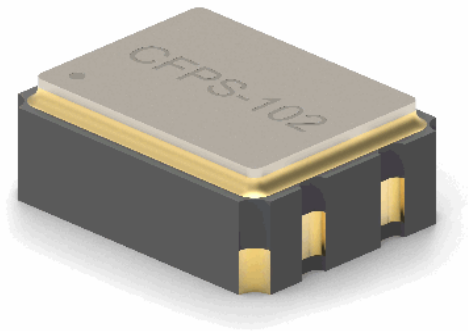
- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-883F, Method 2002.4: 1500G, 0.5ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: MIL-STD-883F, Method 2007.3: 20G (20Hz-2000Hz), 1.52mm amplitude, 20mins in 3 mutually perpendicular planes (total 4hrs)

### Compliance

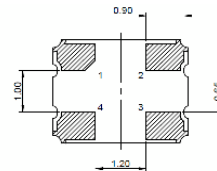
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

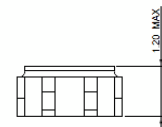
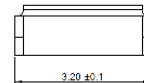
- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Alternative packing option available



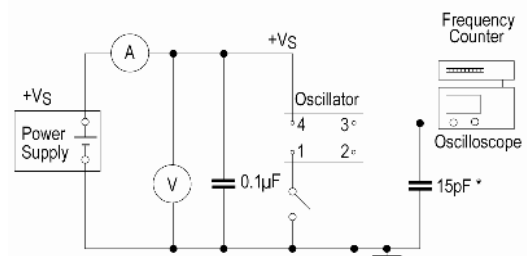
### Outline (mm)



Pad Connections  
1: Standby  
2: GND  
3: Output  
4: Vs



### Test Circuit



\* Inclusive of jigging and equipment capacitance

### Sales Office Contact Details:

UK: +44 (0)1460 270200

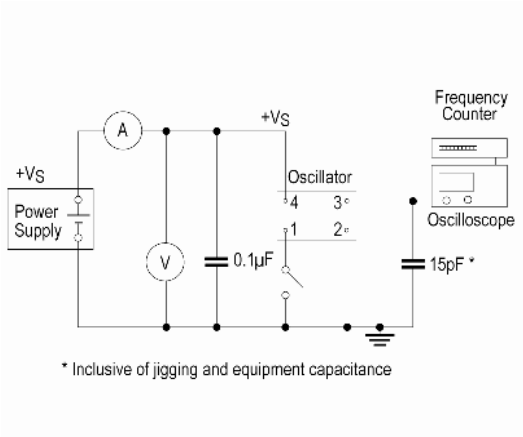
USA: +1.760 668 8935

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

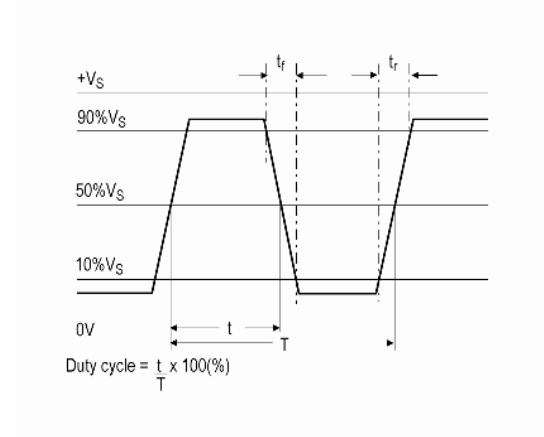
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

**Customer Part:**

**Test Circuit**



**Wave Form**



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