

## Customer Part:



### Description

- Suitable for real time clock applications  
32.768kHz output crystal oscillators  
Ceramic package with a seam sealed metal lid, hermetically sealed
- Model CFPS-109
- Model Issue number 5

### Frequency Parameters

- Frequency 32.7680kHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ±3ppm max per year

### Electrical Parameters

- Supply Voltage 3.3V ±5%
- Current Draw 3.500mA

### 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' to pad 1 enables oscillator output  
Logic '0' 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: 10µA max, 1.35µA 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

### Manufacturing Details

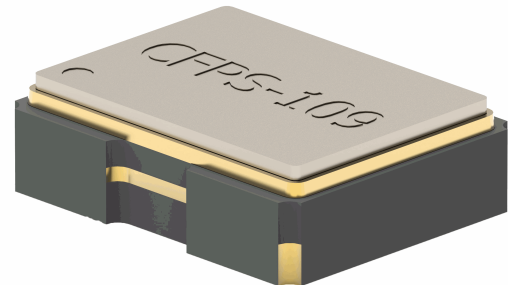
- RoHS Terminations NiAu
- RoHS Reflow Temp 260degC 10s

### Compliance

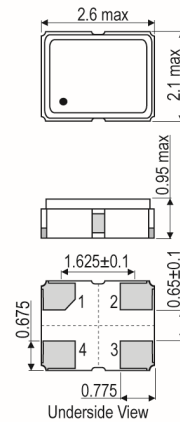
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

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

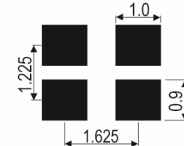


### Outline (mm)

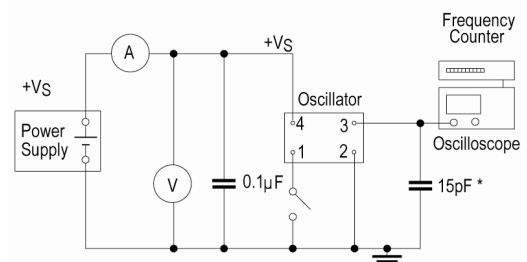


- Pad Connections
1. Standby Operation
  2. GND
  3. Output
  4. +Vs

### Solder Pad Layout



### 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

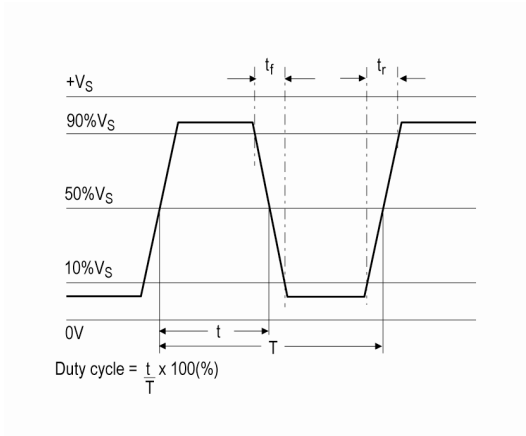
Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

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

**Customer Part:**

- Alternative packing option available

**Wave Form**



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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)

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