



## Description

- 5 x 3.2mm crystal oscillator  
Ceramic package with a seam sealed metal lid, hermetically sealed
- Model CFPS-9
- Model Issue number 8
- Note: please be aware that devices supplied against this model may show slight cosmetic differences depending upon the frequency and specification, however all electrical details remain as per the model specification.

## Frequency Parameters

- Frequency 13.560MHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ±3ppm max per year @ 25°C

## Electrical Parameters

- Supply Voltage 3.3V ±0.3V
- Current Draw 20.000mA

## Output Details

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 10.0ns max
- Duty Cycle 40/60%
- Start up time: 10ms max  
0.8ms typ to 90% of final amplitude (under ideal conditions @ 25°C)

## Output Control

- Enable/Disable 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  
Standby Current: 10µA max, 0.9µA typ @25°C

## Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

## Manufacturing Details

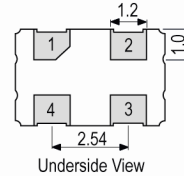
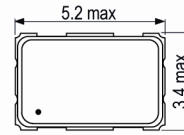
- RoHS Terminations NiAu
- RoHS Reflow Temp 260°C 10s max

## Compliance

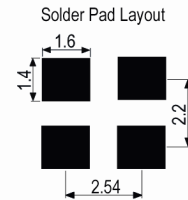
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



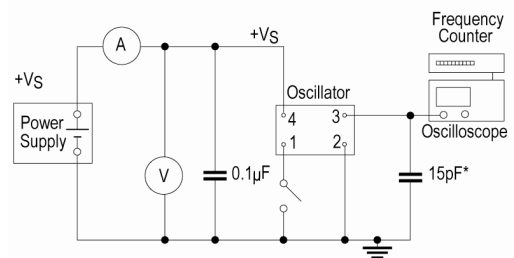
## Outline (mm)



- Pad Connections
1. Enable/Disable
  2. GND
  3. Output
  4. +Vs



## Test Circuit



\* Inclusive of jiggging and equipment capacitance

## Sales Office Contact Details:

UK: +44 (0)1460 270200  
Germany: 0800 1808 443

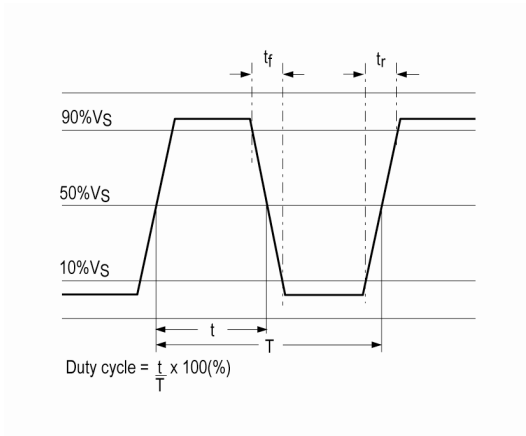
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USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

### Packaging Details

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

### Wave Form



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