



### Description

- Standard 3.2 x 2.5 crystal oscillator  
Ceramic package with a seam sealed metal lid, hermetically sealed
- Model CFPS-39
- Model Issue number 4

### Frequency Parameters

- Frequency 48.0MHz
- Frequency Tolerance @ 25°C INCLUSIVE
- 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
- Supply Voltage Tolerance ±10%
- Current Draw 20mA max

### Output Details

- Output Compatability CMOS
- Output Load 15pF max
- Rise and Fall time (10% - 90%) 5ns max
- Duty Cycle 45/55%

### 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  
Standby Current: 10µA max  
Start-Up Time: 10ms max

### Environmental Parameters

- 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)
- Storage Temperature Range: -55 to 125°C

### Compliance

- RoHS Status Compliant
- REACH Status Compliant

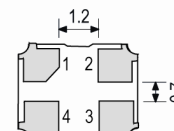
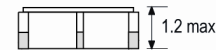
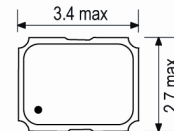
### Packaging

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

*This document is correct at the time of printing; please contact your local office for the latest version.*



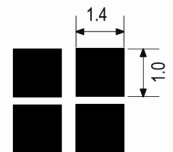
### Outline (mm)



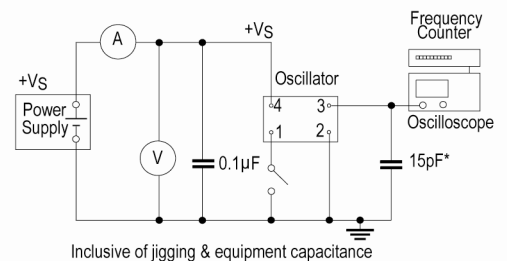
Underside View

- Pad Connections
- Standby Operation
  - GND
  - Output
  - +VS

### Solder Pad Layout



### Test Circuit



### Sales Office Contact Details:

UK: +44 (0)1460 270200

Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18

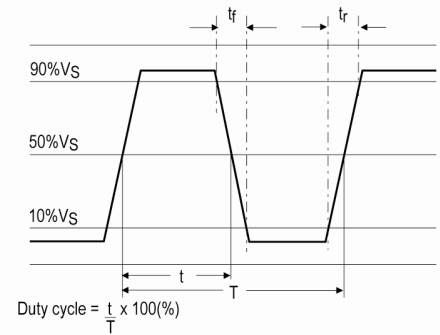
USA: +1 (0) 408 455 2426

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

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



**Wave Form**



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

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