

### Customer Part:

#### Description

- 5 x 3.2mm crystal oscillator.  
Ceramic package with a seam sealed metal lid, hermetically sealed.
- Model CFPS-9
- Model Issue number 10

#### Frequency Parameters

- Frequency 16.0MHz
- Frequency Stability  $\pm 25.00\text{ppm}$
- Operating Temperature Range  $-10.00$  to  $70.00^\circ\text{C}$
- Ageing  $\pm 5\text{ppm}$  max per year @  $25^\circ\text{C}$

#### Electrical Parameters

- Supply Voltage  $3.3\text{V} \pm 10\%$
- Current Draw  $11.000\text{mA}$
- Note: parameters are referenced to  $15\text{pF}$  load.

#### Output Details

- Output Compatibility CMOS
- Drive Capability  $15\text{pF}$  typ,  $30\text{pF}$  max
- Rise and Fall Time  $10.0\text{ns}$  max
- Duty Cycle 40/60
- Start up time:  $10\text{ms}$  max

#### 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:  $10\mu\text{A}$  max

#### Environmental Parameters

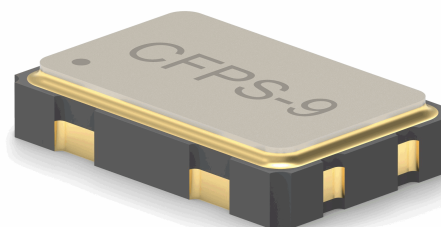
- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock: Half Sine shock pulse with peak acceleration  $500\text{g}$ ; Pulse duration:  $0.3\text{ms}$ .
- Vibration: MIL-STD-202 Method 204.  $5\text{g}$  for 20 minutes, 12 cycles in each of the 3 orientations,  $10 - 2000\text{Hz}$ . As per Table 11 of AEC-Q200.

#### Manufacturing Details

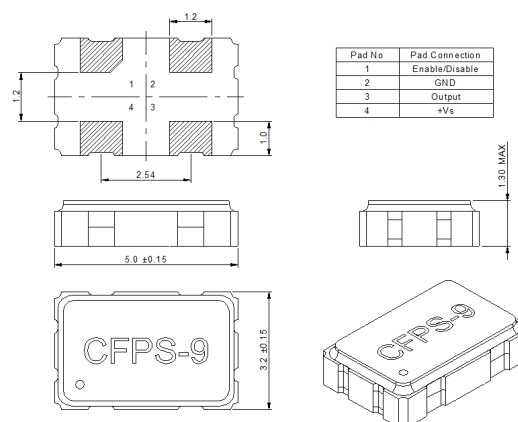
- RoHS Terminations NiAu
- RoHS Reflow Temp  $260^\circ\text{C}$  10s max

#### Compliance

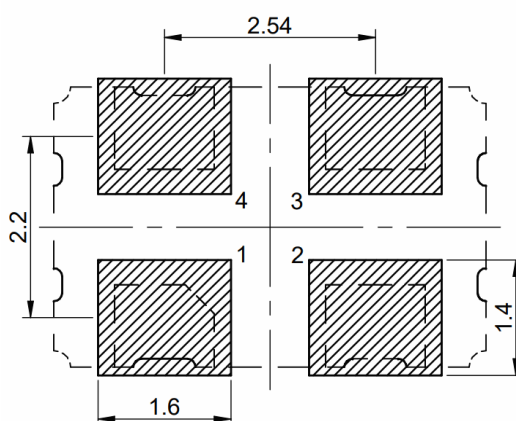
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



#### Outline (mm)



#### Recommended Solder Pad Layout



#### Sales Office Contact Details:

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

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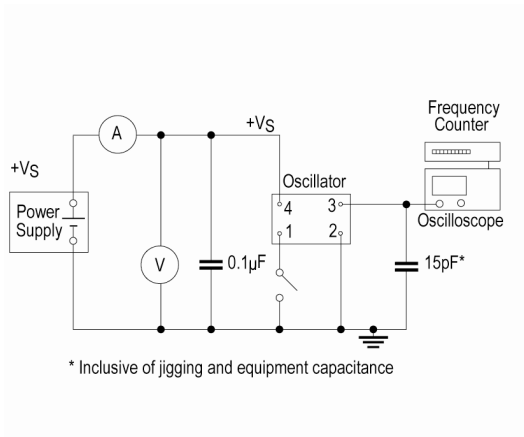
### Customer Part:

#### Packaging Details

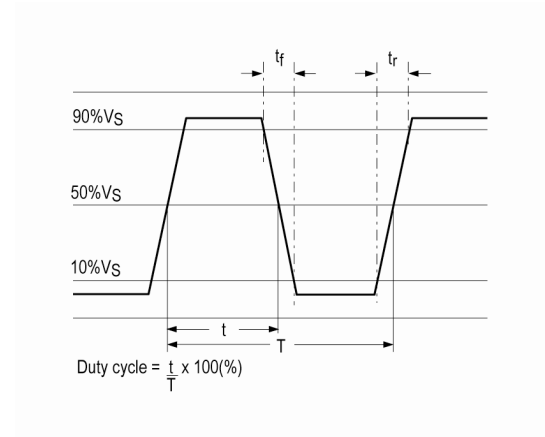
- Tape & reel in accordance with EIA-481  
Quantities below the standard reel size to be supplied on cut tape.

Standard Pack Quantity: 1,000

### Test Circuit



### Waveform



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