

SIMPLE PACKAGED CRYSTAL OSCILLATOR



Part Number: **830208229409** | CFPS-109

AKA Number: LFSPX0082294

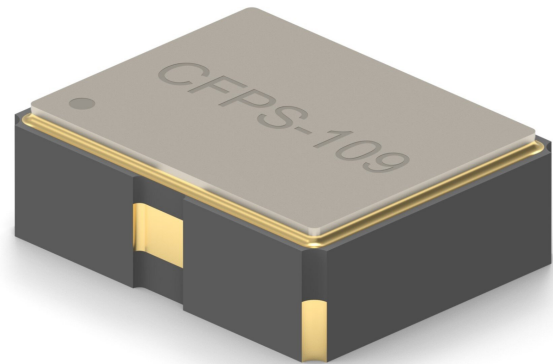
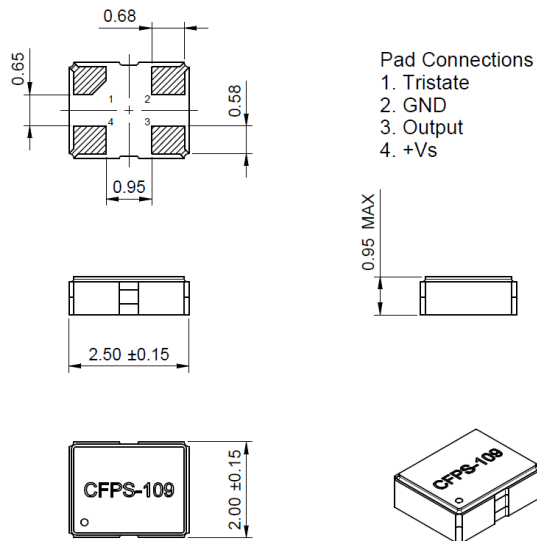


General Information

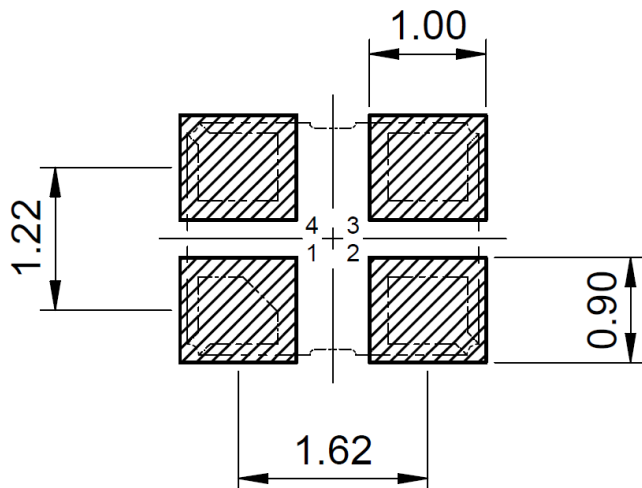
32.768 kHz output crystal oscillator suitable for real time clock applications.

Ceramic package with a seam sealed metal lid, hermetically sealed.

Dimensions [mm]



Recommended Land Pattern [mm]



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Frequency Parameters

Frequency	32.7680 kHz
Frequency Tolerance	± ppm
Frequency Stability	± 100 ppm
Operating Temperature	-40 °C to 125 °C
Ageing	± 3 ppm max per year

Output Details

Output Compatibility	CMOS
Drive Capability	15 pF max.

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: 35 ms max, 2 ms typ to 90 % of final amplitude (under ideal conditions @ 25 °C)
- Standby Current: 10 µA max, 1.35 µA typ @ 25 °C

Material Parameters

Termination Finish	Ni Au
Moisture Sensitivity Level (MSL)	Not Applicable

Manufacturing Details

Reflow: 260 °C max for 10 s max.

Electrical Parameters

Supply Voltage	3.3 V ± 5 %
Load Capacitance C_L	Series Resonant
Current Consumption	3.5 mA max.
Rise Time t_r	50 ns max.
Fall Time t_f	50 ns max.
Duty Cycle	40/60 %

Environmental Parameters

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

Technical Standards

RoHS Status	2015/863/EU - Compliant
REACH Status	Compliant

Packaging Details

Packaging SPQ	Tape & Reel 3000 pcs
Tape & reel in accordance with EIA-481	
Quantities below the standard reel size to be supplied on cut tape.	

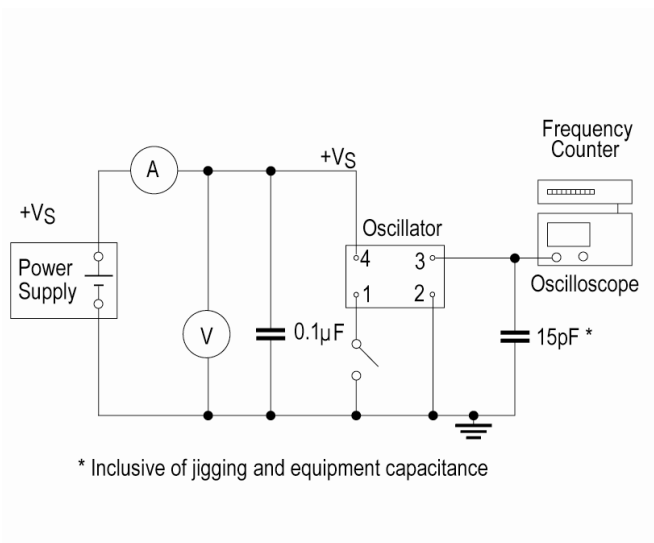
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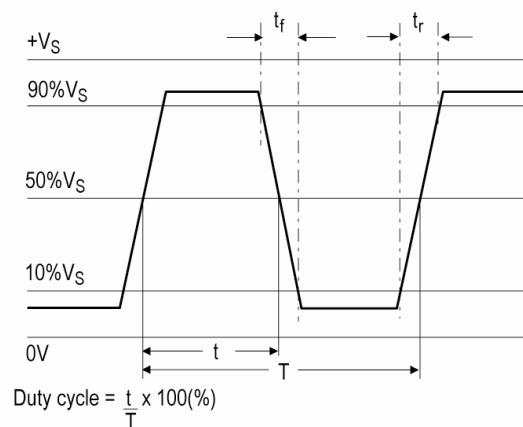
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Test Circuit



Waveform



Company Address

IQD Frequency Products Ltd.
Station Road
Crewkerne
Somerset
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