

SIMPLE PACKAGED CRYSTAL OSCILLATOR

Part Number: 830208228309 | CFPS-102

AKA Number: LFSPX0082283

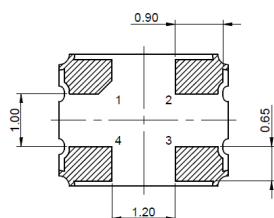


General Information

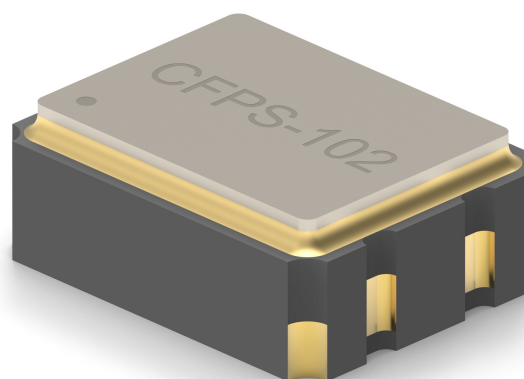
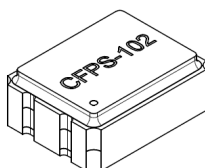
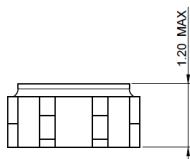
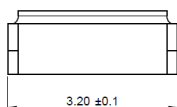
32.768 kHz output crystal oscillator suitable for real time clock applications.

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

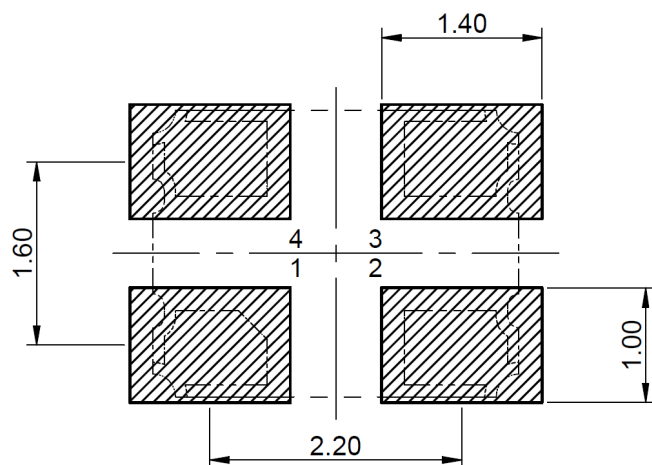
Dimensions [mm]



Pad Connections
1: Standby
2: GND
3: Output
4: Vs



Recommended Land Pattern [mm]



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Frequency Parameters

Frequency	32.7680 kHz
Frequency Tolerance	INCLUSIVE
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' (>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.
- Start-up Time: 35 ms max, 2 ms typ to 90 % of final amplitude (under ideal conditions @ 25 °C)
- Standby Current: 20 µA max, 1.7 µA typ @ 25 °C

Material Parameters

Termination Finish	Au 0.3 µm to 1 µm
Moisture Sensitivity Level (MSL)	Not Applicable

Electrical Parameters

Supply Voltage	1.8 V ± 5 %
Current Consumption	1.5 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 (20 Hz - 2000 Hz), 1.52 mm amplitude, 20 mins in 3 mutually perpendicular planes (total 4 hrs).	

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.	

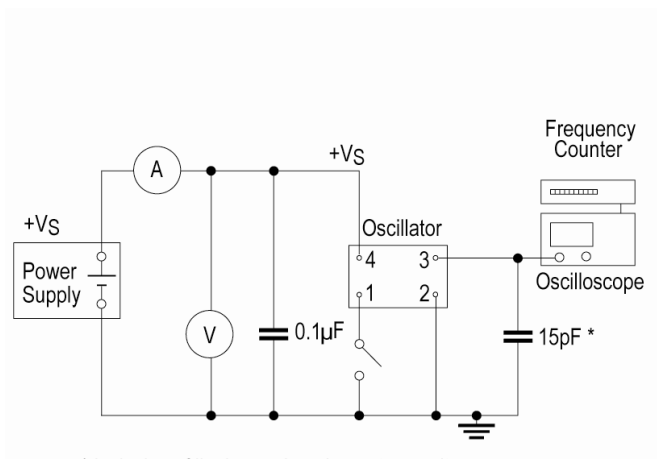
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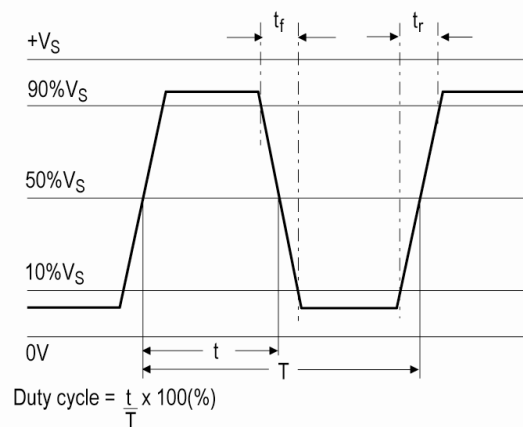
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Test Circuit



* Inclusive of jigging and equipment capacitance

Waveform



Company Address

IQD Frequency Products Ltd.
Station Road
Crewkerne
Somerset
TA18 8AR, United Kingdom