

SIMPLE PACKAGED CRYSTAL OSCILLATOR

Part Number: 831055678 | CFPS-39

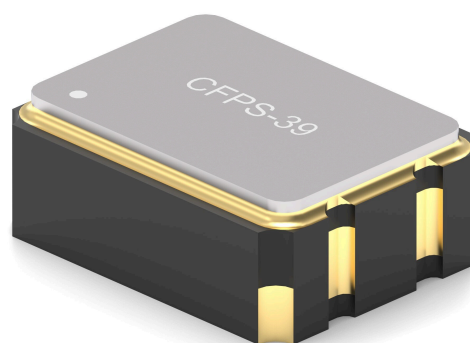
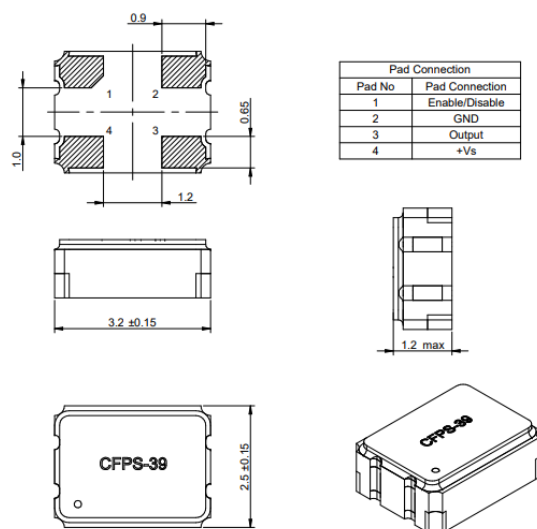
AKA Number: LFSPX0055678

General Information

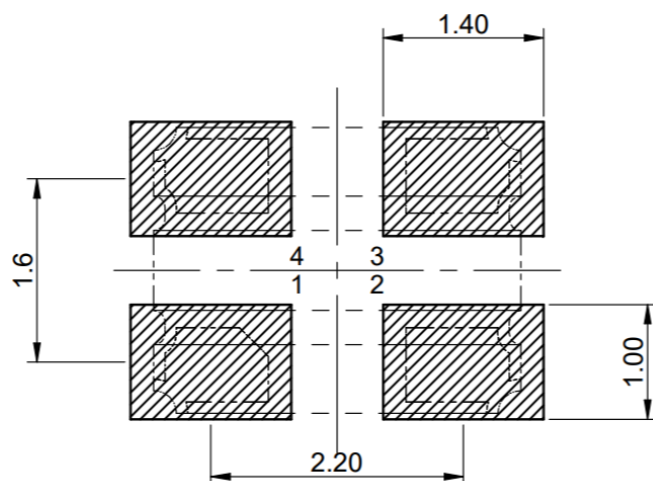
Surface mount 3.2 x 2.5 mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.

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.

Dimensions [mm]



Recommended Land Pattern [mm]



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Frequency Parameters

Frequency	25.0 MHz
Frequency Tolerance	INCLUSIVE
Frequency Stability	± 25 ppm
Operating Temperature	-40 °C to 85 °C
Ageing	± 5 ppm max. per year @ 25 °C

Output Details

Output Compatibility	CMOS
Drive Capability	15 pF max.

- Output Low VoL: 10 % Vs max.
Output High VoH: 90 % Vs min.
- Start-Up Time: 10 ms 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.

Standby Current: 10 µA max.

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 ± 10 %
Current Consumption	20 mA max.
Rise Time t_r	7 ns max.
Fall Time t_f	7 ns max.
Duty Cycle	40/60 %

Noise Parameters

RMS Phase Jitter:

Frequency range 10 MHz to 39.9 MHz:

Phase Jitter (12 kHz to 5 MHz): 1 ps rms max.

Frequency range 40 MHz to 125 MHz:

Phase Jitter (12 kHz to 20 MHz): 1 ps rms max.

Environmental Parameters

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

- Shock: Half Sine shock pulse with peak acceleration 500 g;
Pulse duration: 0.3 ms
- Vibration: MIL-STD-202 Method 204. 5 g for 20 minutes, 12 cycles in each of the 3 orientations, 10 - 2000 Hz. As per Table 11 of AEC-Q200.

Technical Standards

RoHS Status	2015/863/EU - Compliant
REACH Status	(EC)1907/2006 - Compliant

Packaging Details

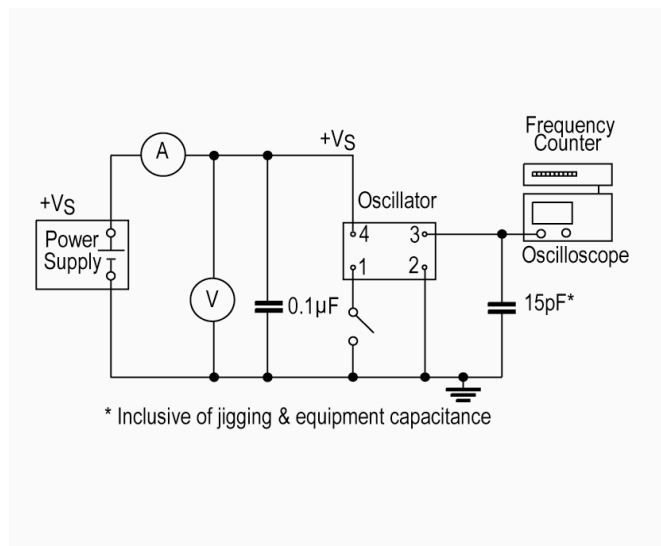
Packaging SPQ	Tape & Reel 3000 pcs
Tape & reel in accordance with EIA-481	
Quantities below the standard reel size to be supplied on cut tape.	

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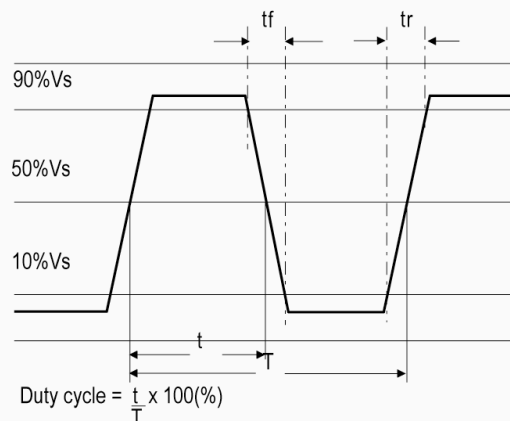
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Test Circuit



Waveform



Company Address

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