

# SIMPLE PACKAGED CRYSTAL OSCILLATOR



Part Number: **831056269** | IQXO-794

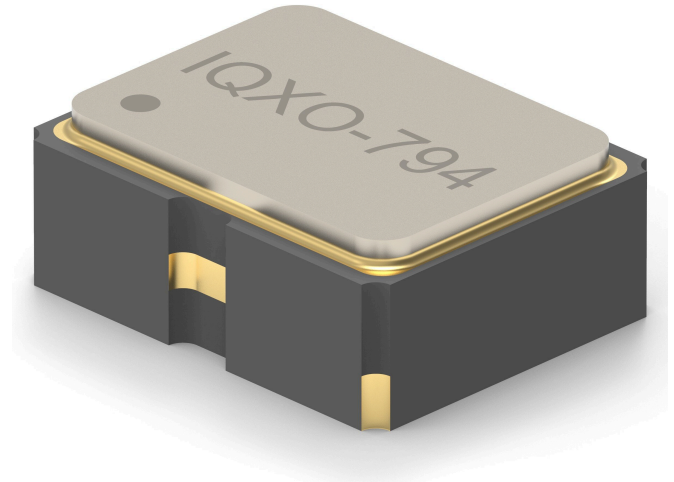
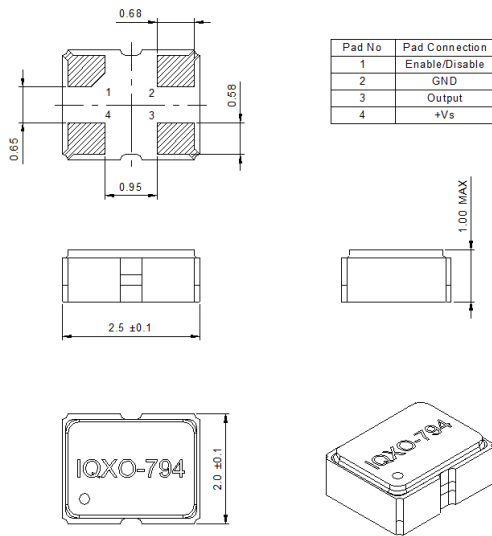
AKA Number: LFSPX0056269



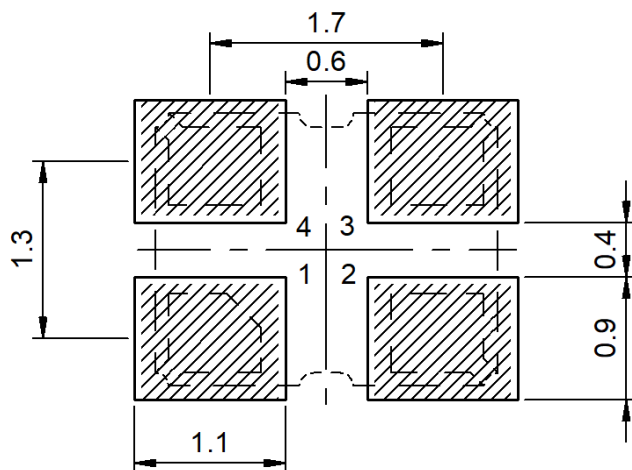
## General Information

Standard 2.5 x 2.0 oscillator in a ceramic package with a hermetically sealed metal lid.

## Dimensions [mm]



## Recommended Land Pattern [mm]



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## Frequency Parameters

Frequency	25.0 MHz
Frequency Tolerance	INCLUSIVE
Frequency Stability	± 50 ppm
Operating Temperature	-40 °C to 85 °C
Ageing	± 5 ppm per year

## Output Details

Output Compatibility	CMOS
Start Up Time:	0.9ms typ to 90% of final amplitude (under ideal conditions @25 °C) 10ms max
Output Voltage Levels:	Output Low (VoL): 10% Vs max Output High (VoH): 90% Vs min

## Output Control

- Enable/Disable:  
Logic '1' ( $\geq 70\%$  Vs) to pad 1 enables oscillator output.  
Logic '0' ( $\leq 30\%$  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:  
0.5 $\mu$ A typ @25 °C  
10 $\mu$ A max

## Material Parameters

Moisture Sensitivity Level (MSL)	Not Applicable
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## Manufacturing Details

260 °C max for 10 seconds max

## Company Address

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

## Electrical Parameters

Supply Voltage	1.8 V ± 10 %
Current Consumption	12 mA max.
Rise Time $t_r$	7 ns max.
Fall Time $t_f$	7 ns max.
Duty Cycle	40/60 %

## Noise Parameters

- Period Jitter (pk-pk): ±80ps typ
- Period Jitter (1 $\sigma$ ): ±10ps typ
- RMS Phase Jitter (12kHz to 20MHz): 1ps max

## Environmental Parameters

Storage Temperature Range:	-55 °C to 125 °C
Shock: Half Sine shock pulse with peak acceleration 500g; Pulse duration: 0.3ms	
Vibration: MIL-STD-202 Method 204. 5g 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-481D	