

SIMPLE PACKAGED CRYSTAL OSCILLATOR

Part Number: 8302100270 | IQXO-540

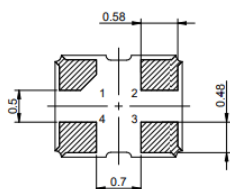
AKA Number: LFSPXO100270



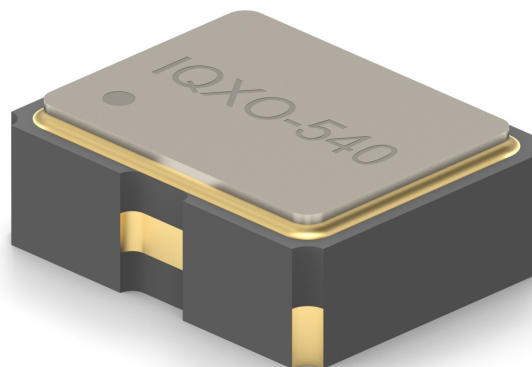
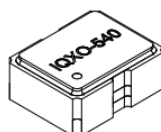
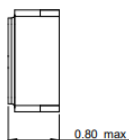
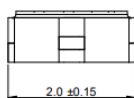
General Information

Standard 2.0 x 1.6 mm crystal oscillator in a hermetically sealed ceramic package with a seam sealed metal lid.

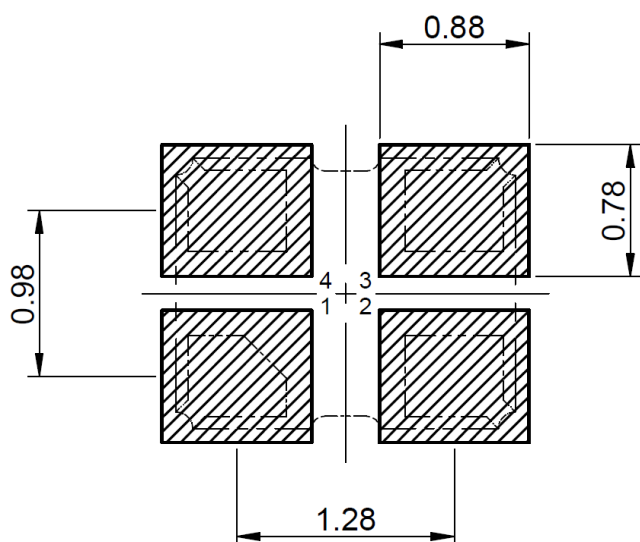
Dimensions [mm]



Pad Connection	
Pad No	Pad Connection
1	Enable/Disable
2	GND
3	Output
4	+Vs



Recommended Land Pattern [mm]



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Part Number: **8302100270** | IQXO-540

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Frequency Parameters

Frequency	8.0 MHz
Frequency Tolerance	INCLUSIVE
Frequency Stability	± 50 ppm
Operating Temperature	-40 °C to 125 °C
Ageing	± 5 ppm max. per year @ 25 °C

Inclusive of tolerance, supply voltage and load variations over the operating temperature range.

Output Details

Output Compatibility	CMOS
Drive Capability	15 pF max.

Start up time: 10 ms max, 0.7 ms typ. to 90 % of final amplitude (under ideal conditions @ 25 °C).

Output High (VoH): 90 % of Vs min.
Output Low (VoL): 10 % of Vs max.

Output Control

- Standby Operation:
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: 10 μ A max, 1.0 μ A typ. @ 25 °C

Material Parameters

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

Manufacturing Details

Reflow: 260°C max. over 10 seconds max.

Electrical Parameters

Supply Voltage	3.3 V ± 10 %
Current Consumption	7 mA max.
Rise Time t_r	7 ns max.
Fall Time t_f	7 ns max.
Duty Cycle	40/60 %

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.

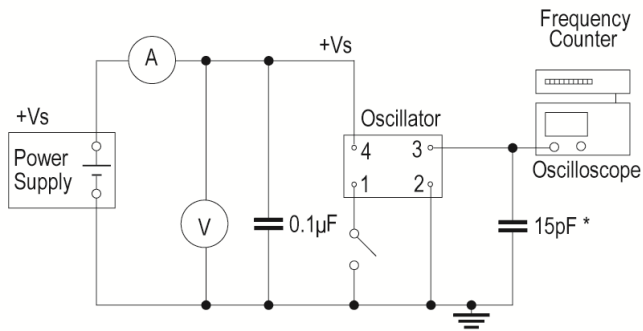
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Part Number: 8302100270 | IQX0-540

AKA Number: LFSPX0100270

Test Circuit



* Inclusive of jigging and equipment capacitance

Company Address

IQD Frequency Products Ltd.

Station Road

Crewkerne

Somerset

TA18 8AR, United Kingdom