

# TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR



Part Number: 8304094776 | IQXT-205-5-30

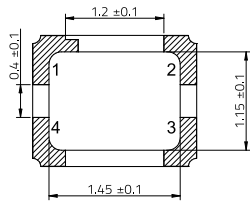
AKA Number: LFTCXO094776



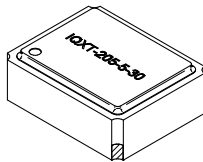
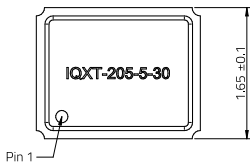
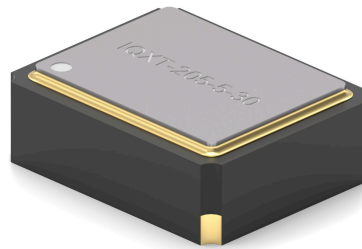
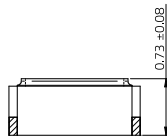
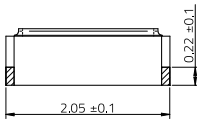
## General Information

IQXT-205-5-30 is a 2.0 x 1.6mm SMD Temperature Compensated Crystal Oscillator (TCXO) in ceramic package with a wide operating temperature range.

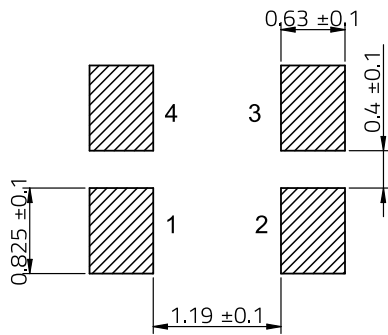
## Dimensions [mm]



Pad	Pad Connection
1	GND
2	GND
3	Output
4	+Vs



## Recommended Land Pattern [mm]



# TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR



Part Number: **8304094776** | IQXT-205-5-30

AKA Number: LFTCX0094776

## Frequency Parameters

Frequency	32.0 MHz
Frequency Tolerance	$\pm 2$ ppm @ 25 °C $\pm 2$ °C
Frequency Stability	$\pm 2.5$ ppm
Operating Temperature	-40 °C to 105 °C
Ageing	$\pm 1$ ppm max. first year @ 25 °C

- Stability: Reference to the midpoint between minimum and maximum frequency value
- Supply Voltage Variation (measurement referenced to frequency observed with TA = 25 °C, Vs = 3.3 V  $\pm 5$  % and load = 10 k $\Omega$  / /10 pF):  $\pm 0.2$  ppm max.
- Load Variation (10 % load change, measurement referenced to frequency observed with TA = 25 °C, Vs = 3.3 V and load change = 10 k $\Omega$  // 10pF)::  $\pm 0.2$  ppm max
- Ageing: TA = 25 °C, Vs = 3.3V , and after 1h of operation.

## Output Details

Output Compatibility	Clipped sine
Drive Capability	10 k $\Omega$ // 10 pF

Output Level: 0.8 V pk-pk min

## Material Parameters

Moisture Sensitivity Level (MSL) 3

## Manufacturing Details

Reflow: 260 °C max for 30 sec max

## Company Address

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

## Electrical Parameters

Supply Voltage	1.8 V to 3.3 V
Current Consumption	2 mA max.

- Start up time (more than 90 % of final output voltage): 2 ms max.
- Current consumption @ 25 °C, Vs = 3.3 V and load = 10 k $\Omega$  // 10pF
- Note: Test conditions are at 3.3V

## Environmental Parameters

Storage Temperature Range: -40 °C to 105 °C

- Vibration: IEC 68-2-06 Test Fc. 10 Hz to 2000 Hz 0.75 mm displacement, acceleration 10 g. One cycle per 30 min, test 2 hour. (3 times for each of the 3 directions X, Y, Z)
- Shock: IEC 68-2-27 Test Ea Severity 50 A 100 g 6 ms half sine wave (3 times for each of the 3 directions X, Y, Z)

## Technical Standards

RoHS Status	2015/863/EU - Compliant
REACH Status	(EC)1907/2006 - Compliant
ESD	4,000 V Human Body Model 400 V Machine Model

## Packaging Details

Packaging SPQ Tape & Reel 3000 pcs  
Tape & reel in accordance with EIA-481