



DFXO

LVDS - LVPECL & CMOS Output

20 MHz to 300 MHz

Differential Output Crystal Oscillator

DESCRIPTION

Statek's 5 mm x 7 mm surface mount Differential Output Crystal Oscillator is designed for applications requiring low jitter and ultra high frequency differential outputs in a small footprint. Offered at frequencies from 20 MHz to 300 MHz with operation over a temperature range of (-40°C to +105°C). No external decoupling capacitor required with internal capacitor.

FEATURES

- LVDS - LVPECL- CMOS outputs available
- Low phase noise - Low phase jitter
- Internal 0.01µF SMD decoupling capacitor
- Low Allan deviation
- High Frequency Fundamental Mode Crystal
- Extended Industrial temperature range

APPLICATIONS

Military & Aerospace

- Avionics
- Communications
- Networking

TERMINATIONS

Designation	Termination
SM1	Gold Plated (Pb Free)
SM3	Solder Dipped
SM5	Solder Dipped (Pb Free)

ENABLE/DISABLE OPTIONS (T/N)

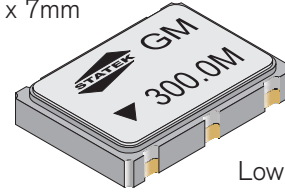
Statek offers two enable/disable options: T and N. The T-version has a Tri-State output and continues to oscillate internally when the output is put into the high Z state. As a result, when re-enabled, the oscillator does not have to restart and an output with a stable frequency resumes almost immediately. The N-version does not have PIN 2 connected internally and so has no enable/disable capability. The following table describes the Enable/Disable option T.

ENABLE/DISABLE OPTION T FUNCTION TABLE

	Enable (PIN 1 High*)	Disable (PIN 1 Low)
Output	Frequency Output	High Z State
Oscillator	Oscillates	Oscillates
Current	Normal	Lower than normal

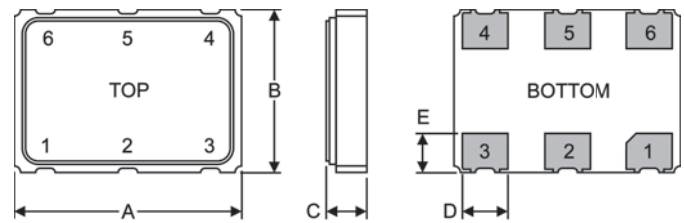
*When PIN 1 is allowed to float, it is held high by an internal pull-up resistor.

5mm x 7mm



Low Profile

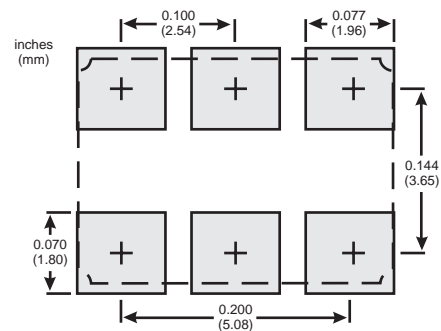
DIMENSIONS



PACKAGE DIMENSIONS

Dimension	Minimum mm	Typical mm	Maximum mm
A	6.86	7.00	7.16
B	4.85	5.00	5.16
C (SM1)	1.55	1.75	1.95
C (SM3/SM5)	1.65	1.85	2.05
D	1.19	1.40	1.41
E	1.07	1.27	1.47

SUGGESTED LAND PATTERN



PIN CONNECTIONS

1. (T) Enable/Disable or not connected (N)
2. (NC) Not Connected
3. Ground
4. LVDS - LVPECL - CMOS
5. LVDS - LVPECL (complementary)
6. Supply Voltage (V_{DD})