

LTC6908IS6-1#TRMPBF

Data Sheet

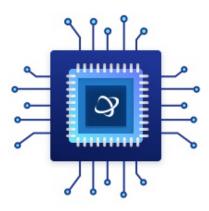
10MHz MEMS Oscillator, 6-Pin TSOT-23, ±4.5% LTC6908IS6-1#TRMPBF

Manufacturers <u>Analog Devices, Inc</u>

Package/Case CS6

Product Type Clock & Timer ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LTC6908IS6-1#TRMPBF or Email to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC6908 is an easy-to-use precision oscillator that provides 2-outputs, shifted by either 180° or 90°. The oscillator frequency is programmed by a single external resistor (RSET) and spread spectrum frequency modulation (SSFM) can be activated for improved electromagnetic compatibility (EMC) performance.

The LTC6908 operates with a single 2.7V to 5.5V supply and provides rail-to-rail, 50% duty cycle square wave outputs. A single resistor from 10k to 2M is used to select an oscillator frequency from 50kHz to 10MHz (5V supply). The oscillator can be easily programmed using the simple formula outlined>

The LTC6908's SSFM capability modulates the output frequency by a pseudorandom noise (PRN) signal to decrease the peak electromagnetic radiation level and improve EMC performance. The amount of frequency spreading is fixed at $\pm 10\%$ of the center frequency. When SSFM is enabled, the rate of modulation is selected by the user. The three possible modulation rates are fOUT/16, fOUT/32 and fOUT/64.

Features

LTC6908-1: Complementary Outputs (0°/180°)

LTC6908-2: Quadrature Outputs (0°/90°)

50kHz to 10MHz Frequency Range

One External Resistor Sets the Frequency

Optional Spread Spectrum Frequency Modulation for Improved EMC Performance

 400μ A Supply Current Typical (V+ = 5V, 50kHz)

Frequency Error $\leq 1.5\%$ Max = 3V)

Fast Start-Up Time: 260µs Typical (1MHz)

Outputs Muted Until Stable

Operates from a Single 2.7V to 5.5V Supply

Available in Low Profile (1mm) ThinSOT and DFN (2mm × 3mm) Packages

Application

Switching Power Supply Clock Reference

Portable and Battery-Powered Equipment

Precision Programmable Oscillator

Charge Pump Driver

Related Products



LTC6957HMS-3#PBF

Analog Devices, Inc

MSOP-12



LTC1799CS5#TRMPBF

Analog Devices, Inc

TSOT23



LTC1799CS5#TRPBF

Analog Devices, Inc

SMD5



LTC6906CS6

Analog Devices, Inc

SOT-23



LTC6994IS6-2#TRMPBF

Analog Devices, Inc

SOT-6



LTC6902IMS#PBF

Analog Devices, Inc

MSOP10



LTC6906CS6#TRMPBF

Analog Devices, Inc

SOT23



LTC1799IS5

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SOT23-5