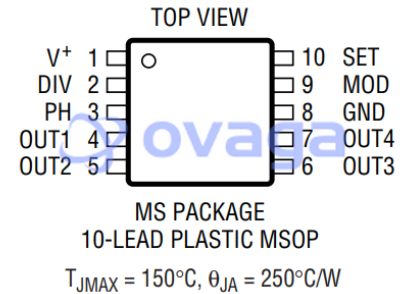


Timer, Oscillator & Pulse Generator IC, Resistor Set, 20 MHz, 2.7 V to 5.5 V, MSOP-10

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP10
Product Type	Clock & Timer ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC6902IMS#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC6902 is a precision, low power and easy-to-use oscillator that provides multiphase outputs in a small package. The oscillator frequency is set by a single external resistor (RSET). The LTC6902 also provides an optional spread spectrum frequency modulation (SSFM) capability that can be activated and controlled by an additional external resistor (RMOD).

The LTC6902's master oscillator is controlled by the RSET resistor and has a range of 100kHz and 20MHz. In order to accommodate a wider output frequency range, a programmable divider (divide by 1, 10 or 100) is included. The integrated programmable multiphase circuit provides either 2-, 3- or 4-phase waveforms.

The LTC6902's SSFM capability modulates the oscillator's frequency by a pseudorandom noise (PRN) signal to spread the oscillator's energy over a wide frequency band. This spreading decreases the peak electromagnetic radiation level and improves electromagnetic compatibility (EMC) performance. The amount of frequency spreading is programmable by a single additional external resistor (RMOD) and is disabled by grounding the MOD pin.

## Features

2-, 3- or 4-Phase Outputs

Optional Spread Spectrum Frequency Modulation for Improved EMC Performance

5kHz to 20MHz Frequency Range

One External Resistor Sets the Frequency

One External Resistor Sets Percent Frequency Spreading

400 $\mu$ A Typical Supply Current,>

Frequency Error < 1.5% Max, 5kHz to 10MHz>

Frequency Error < 2% Max, 5kHz to 10MHz>

Fast Start-Up Time: 50 $\mu$ s to 1.5ms

100 $\Omega$  CMOS Output Driver

Operates from a Single 2.7V to 5.5V Supply

Available in 10-Lead MS Package

## Application

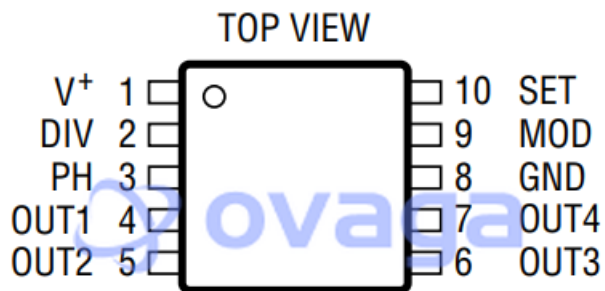
Switching Power Supply Clock Reference

Portable and Battery-Powered Equipment

PDAs

Cell Phones

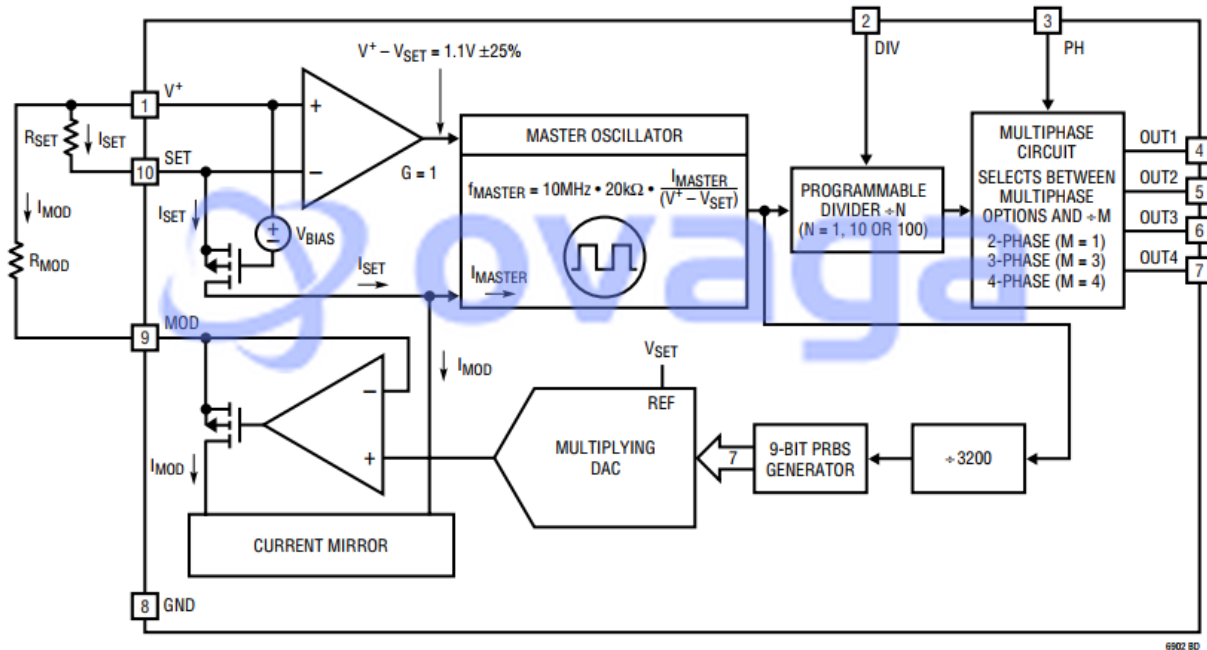
Clocking Switched Capacitor Filters



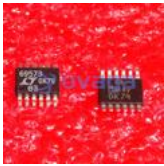
MS PACKAGE  
10-LEAD PLASTIC MSOP

$T_{JMAX} = 150^{\circ}\text{C}$ ,  $\theta_{JA} = 250^{\circ}\text{C/W}$

# BLOCK DIAGRAM

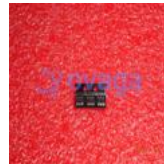


## Related Products



[LTC6957HMS-3#PBF](#)

Analog Devices, Inc  
MSOP-12



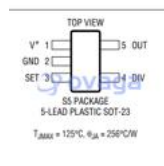
[LTC6994IS6-2#TRMPBF](#)

Analog Devices, Inc  
SOT-6



[LTC1799CS5#TRMPBF](#)

Analog Devices, Inc  
TSOT23



[LTC1799CS5#TRPBF](#)

Analog Devices, Inc  
SMD5



[LTC6906CS6#TRMPBF](#)

Analog Devices, Inc  
SOT23



[LTC6906CS6](#)

Analog Devices, Inc  
SOT-23



[LTC1799IS5](#)

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SOT23-5



[LTC6904CMS8](#)

Analog Devices, Inc  
MSOP-8