

# LTC6902CMS#PBF

Data Sheet

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

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

Package/Case MSOP-10

Product Type Clock & Timer ICs

RoHS Pb-free Halide free

Lifecycle Images are for reference only

Please submit RFQ for LTC6902CMS#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **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

400μA Typical Supply Current,>

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

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

Fast Start-Up Time: 50µs 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

### **Related Products**



## LTC6957HMS-3#PBF

Analog Devices, Inc

MSOP-12



## LTC1799CS5#TRMPBF

Analog Devices, Inc

TSOT23



#### LTC1799CS5#TRPBF

Analog Devices, Inc

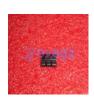
SMD5



#### 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

Analog Devices, Inc

SOT23-5