

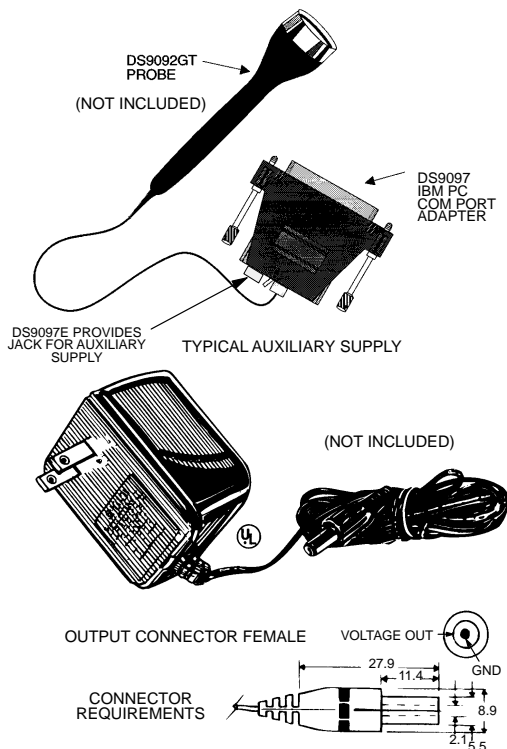
DALLAS SEMICONDUCTOR

DS9097/DS9097E COM Port Adapter

FEATURES

- Provides a simple, low-cost interface to an RS232C COM Port for reading and writing iButton devices (DS9097E required for programming DS198x Add-Only iButtons)
- Adapter is powered entirely from an RS232 interface (DS9097E may require optional auxiliary 12V supply)
- Standard DB-25 connector for mating DS9097 to the COM Port of a computer and RJ-11 connector for easy attachment of a probe such as the DS9092GT
- DS9097E has an additional 2.1 mm male power jack to allow for an auxiliary 12V DC supply for programming Add-Only iButtons

Auxiliary supply should be a regulated 12V @ 10 mA minimum, center=GND, outer ring=V+ (Newark Electronics Stock No. 84F2081, Allied Electronics Stock No. 928-9895, Stancor Model STA-300R, or equivalent)



All dimensions are in millimeters.

DESCRIPTION

The DS9097 COM Port Adapter is a simple, low-cost passive adapter which performs RS232C level conversion, allowing an iButton probe to be connected to the serial port of a computer so that an iButton can be read and written directly. The serial port must support a data transmission rate of 115,200 bits/s in order to create the 1-Wire time slots correctly. Nearly all PCs support the required bit rate and are fully compatible with the DS9097. Since an eight bit character on the RS232 bus operating at 115,200 bits/s is used to form the 1-Wire time slots, the maximum effective 1-Wire transfer rate is 14,400 bits/s. A selection of software examples illustrating how to communicate with iButtons using the DS9097 is provided in the DS9092K iButton Starter Kit, available from Dallas Semiconductor.

The DS9097E is an upgraded version of the DS9097 that is capable of supplying the 12 volts necessary to program the EPROM-based iButton products (DS198x Add-Only Memories) in addition to reading and writing standard devices (DS199x). When combined with the appropriate software, the DS9097E can be used in a standalone mode where all of the programming current is supplied by the serial port itself. In this configuration, the maximum number of EPROM bits that can be programmed simultaneously is four on a typical serial port. For higher performance, the above mentioned 12V auxiliary supply can be plugged into the power jack on the DS9097E and with proper software enable the serial port to program up to eight EPROM bits simultaneously.