National Semiconductor

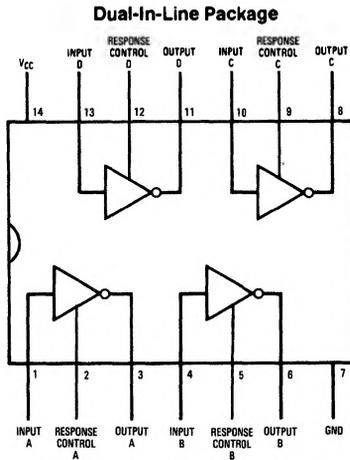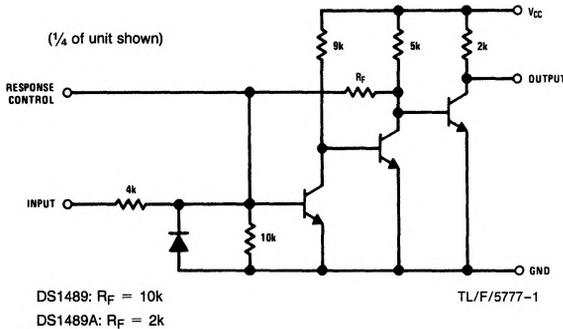# DS1489/DS1489A Quad Line Receiver

General Description

The DS1489/DS1489A are quad line receivers designed to interface data terminal equipment with data communications equipment. They are constructed on a single monolithic silicon chip. These devices satisfy the specifications of EIA Standard RS-232C. The DS1489/DS1489A meet and exceed the specifications of MC1489/MC1489A and are pin-for-pin replacements.

Features

- Four totally separate receivers per package
- Programmable threshold
- Built-in input threshold hysteresis
- "Fail safe" operating mode
- Inputs withstand ±30V

Schematic and Connection Diagrams

(¼ of unit shown)

DS1489: R_F = 10k
DS1489A: R_F = 2k

TL/F/5777–1

Dual-In-Line Package

TL/F/5777–2

Top View
Order Number DS1489J, DS1489AJ,
DS1489M, DS1489AM, DS1489N or DS1489AN
See NS Package Number J14A, M14A or N14A

AC Test Circuit and Voltage Waveforms

TL/F/5777–3

TL/F/5777–4