

Rochester Electronics Manufactured Components

Rochester branded components are manufactured using either die/wafers purchased from the original suppliers or Rochester wafers recreated from the original IP. All recreations are done with the approval of the OCM.

Parts are tested using original factory test programs or Rochester developed test solutions to guarantee product meets or exceed the OCM data sheet.

Quality Overview

- ISO-9001
- AS9120 certification
- Qualified Manufacturers List (QML) MIL-PRF-35835
 - Class Q Military
 - Class V Space Level
- Qualified Suppliers List of Distributors (QSLD)
 - Rochester is a critical supplier to DLA and meets all industry and DLA standards.

Rochester Electronics, LLC is committed to supplying products that satisfy customer expectations for quality and are equal to those originally supplied by industry manufacturers.

The original manufacturer's datasheet accompanying this document reflects the performance and specifications of the Rochester manufactured version of this device. Rochester Electronics guarantees the performance of its semiconductor products to the original OEM specifications. 'Typical' values are for reference purposes only. Certain minimum or maximum ratings may be based on product characterization, design, simulation, or sample testing.

Complete Data Sheet available via web, Harris' home page: <http://www.semi.harris.com> or via Harris AnswerFAX, see Section 17

August 1997

Dual SPDT, CMOS Analog Switch

Features

- Low $r_{DS(ON)}$ 25 Ω
- Switches Greater than 20V_{p-p} Signals with $\pm 15V$ Supplies
- Quiescent Current <100 μA
- Break-Before-Make Switching
 - t_{OFF} 120ns (Typ)
 - t_{ON} 200ns (Typ)
- TTL, CMOS Compatible
- Complete Monolithic Construction
- Supply Range $\pm 5V$ to $\pm 15V$

Description

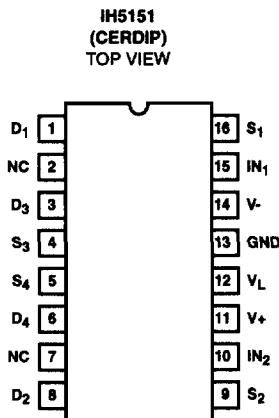
The IH5151 solid state analog switch is designed using an improved, high voltage CMOS technology.

Key performance advantages in the IH5151 are TTL compatibility and ultra low power operation. $r_{DS(ON)}$ switch resistance is typically in the 14 Ω to 18 Ω area, for signals in the -10V to +10V range. Quiescent current is less than 10 μA . The IH5151 also guarantees Break-Before-Make switching which is logically accomplished by extending the t_{ON} time (200ns typical) such that it exceeds t_{OFF} time (120ns typical). This insures that an ON channel will be turned OFF before an OFF channel can turn ON. The need for external logic required to avoid channel to channel shorting during switching is thus eliminated.

Ordering Information

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
IH5151CJE	0 to 70	16 Ld CERDIP	F16.3
IH5151MJE	-55 to 125	16 Ld CERDIP	F16.3
IH5151MJE/883B	-55 to 125	16 Ld CERDIP	F16.3

Pinout



Switching State Diagram

SWITCH STATE SHOWN FOR LOGIC "1" INPUT

