



CD4066BM/CD4066BC Quad Bilateral Switch

General Description

The CD4066BM/CD4066BC is a quad bilateral switch intended for the transmission or multiplexing of analog or digital signals. It is pin-for-pin compatible with CD4016BM/CD4016BC, but has a much lower "ON" resistance, and "ON" resistance is relatively constant over the input-signal range.

Features

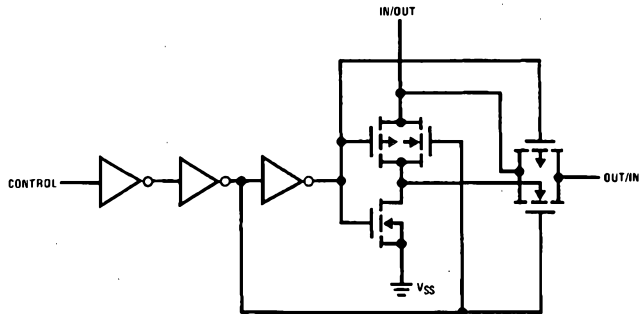
- Wide supply voltage range 3V to 15V
- High noise immunity 0.45 V_{DD} (typ.)
- Wide range of digital and analog switching ±7.5 V_{PEAK}
- "ON" resistance for 15V operation 80Ω
- Matched "ON" resistance ΔR_{ON} = 5Ω (typ.) over 15V signal input
- "ON" resistance flat over peak-to-peak signal range
- High "ON"/"OFF" output voltage ratio 65 dB (typ.) @ f_{is} = 10 kHz, R_L = 10 kΩ
- High degree linearity 0.1% distortion (typ.) @ f_{is} = 1 kHz, V_{is} = 5V_{p-p}
- High degree linearity @ f_{is} = 1 kHz, V_{is} = 5V_{p-p}, V_{DD} - V_{SS} = 10V, R_L = 10 kΩ

- Extremely low "OFF" switch leakage 0.1 nA (typ.) @ V_{DD} - V_{SS} = 10V, T_A = 25°C
- Extremely high control input impedance 10¹²Ω (typ.)
- Low crosstalk -50 dB (typ.) between switches @ f_{is} = 0.9 MHz, R_L = 1 kΩ
- Frequency response, switch "ON" 40 MHz (typ.)

Applications

- Analog signal switching/multiplexing
 - Signal gating
 - Squelch control
 - Chopper
 - Modulator/Demodulator
 - Commutating switch
- Digital signal switching/multiplexing
- CMOS logic implementation
- Analog-to-digital/digital-to-analog conversion
- Digital control of frequency, impedance, phase, and analog-signal-gain

Schematic and Connection Diagrams

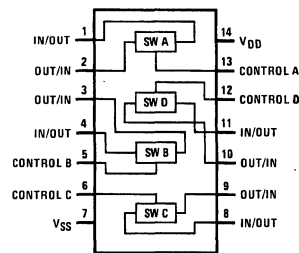


Order Number CD4066B*

*Please look into Section 8, Appendix D for availability of various package types.

See the CMOS Logic Databook for Complete Specifications

Dual-In-Line Package



Top View

TL/F/5665-1