



Data Sheet

ANALOG MULTIPLEXER, 16 X 1, Multiplexer Configuration:16:1, No. of Circuits:1, On State Resistance Max:1.2kohm, Supply Voltage Range: 15V, Operating Temperature Min:-55 C

Manufacturers Renesas Technology Corp

Package/Case CDIP-28

Product Type Switch ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for HI1-0506A-2 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The HI-506A, HI-507A, HI-508A and HI-509A are analog multiplexers with active overvoltage protection. Analog input levels may greatly exceed either power supply without damaging the device or disturbing the signal path of other channels. Active protection circuitry assures that signal fidelity is maintained even under fault conditions that would destroy other multiplexers. Analog inputs can withstand constant 70VP-P levels with ± 15 V supplies. Digital inputs will also sustain continuous faults up to 4V greater than either supply. In addition, signal sources are protected from short circuiting should multiplexer supply loss occur. Each input presents 1k Ω of resistance under this condition. These features make the HI-506A, HI-507A, HI-508A and HI-509A ideal for use in systems where the analog inputs originate from external equipment, or separately powered circuitry. All devices are fabricated with 44V dielectrically isolated CMOS technology. The HI-506A is a single 16-channel multiplexer, the HI-507A is an 8-channel differential multiplexer, the HI-508A is a single 8-channel multiplexer and the HI-509A is a differential 4-channel multiplexer. If input overvoltage protection is not needed the HI-506/507/508/509 multiplexers are recommended. For further information see Application Note AN520.

Features

Analog Overvoltage $70V_{P-P}$

No Channel Interaction During Overvoltage

Maximum Power Supply 44V

Fail Safe with Power Loss (No Latch-Up)

Break-Before-Make Switching

Analog Signal Range $\pm 15 V$

Access Time 500ns

Power Dissipation 7.5mW

Pb-Free Available (RoHS Compliant)





Related Products





Renesas Technology Corp CDIP-16



HI1-0303R5254

Renesas Technology Corp CDIP-14



<u>HI1-5043-2</u>

Renesas Technology Corp CDIP-16



HI9P0547-9Z96

Renesas Technology Corp 28pin-PDIP
5r>28pin-SOICW



80HCPS1432CHMHI

Renesas Technology Corp FCBGA-576



ISL54060IRTZ

Renesas Technology Corp 10pin-TDFN
or>10pin-uTQFN



80HCPS1848CRMI

Renesas Technology Corp 784-BBGA, FCBGA



<u>80HCPS1432CRMI</u>

Renesas Technology Corp 576-BBGA, FCBGA