

CMOS/DMOS Wideband High-Frequency Multiplexer



CWB4500

FEATURES

- High OFF Isolation..... > 62dB @ 10MHz
- Low Channel-to-Channel Crosstalk... > 80dB @ 10MHz
- TTL Capatible Inputs..... 5V
- Low ON Resistance..... 40ohm typical
- Wide Bandwidth..... -3.0dB @ 100MHz
- High Speed Logic Control

APPLICATIONS

- RF and Video Switching
- High Speed Precision Data Acquisition
- ATE

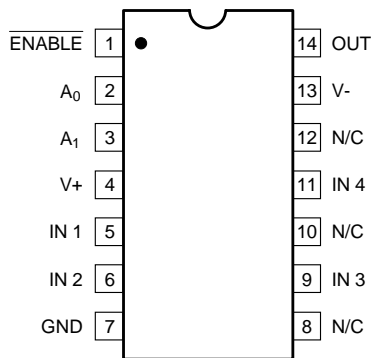
DESCRIPTION

The CWB4500 is a very high performance Monolithic 4 Channel Wideband/Video Multiplexer designed for switching wide bandwidth analog and digital signals. The high speed, low ON resistance and low capacitance is achieved through Calogic's proprietary CMOS/DMOS process that combines low-power CMOS control logic with very fast DMOS switching FETs.

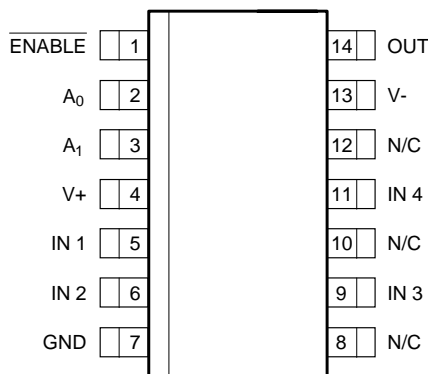
ORDERING INFORMATION

Part	Package	Temperature Range
CWB4500CP	Plastic 14-Pin Dip	0 to +85°C
CWB4500CY	Plastic SO-14 Surface Mount	0 to +85°C
XCWB4500	Sorted Chips in Carriers	0 to +85°C

PIN CONFIGURATION



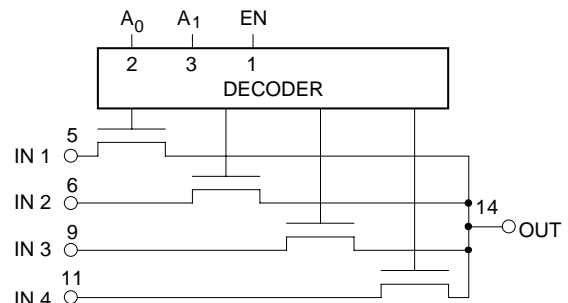
CWB4500CP



CWB4500CY

CWB

FUNCTION DIAGRAM



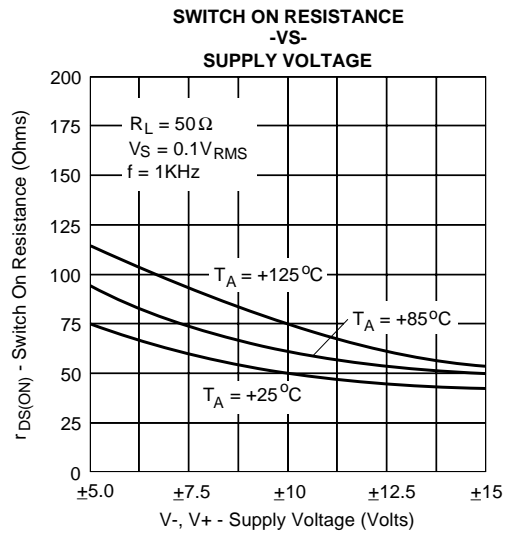
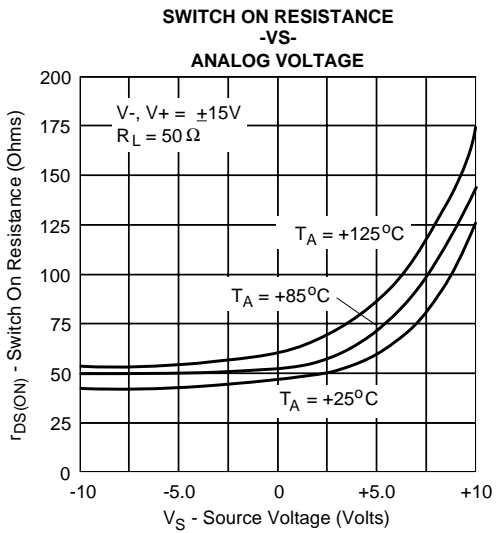
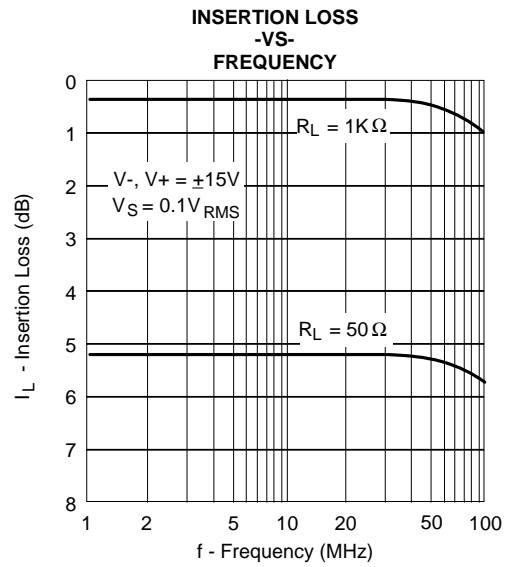
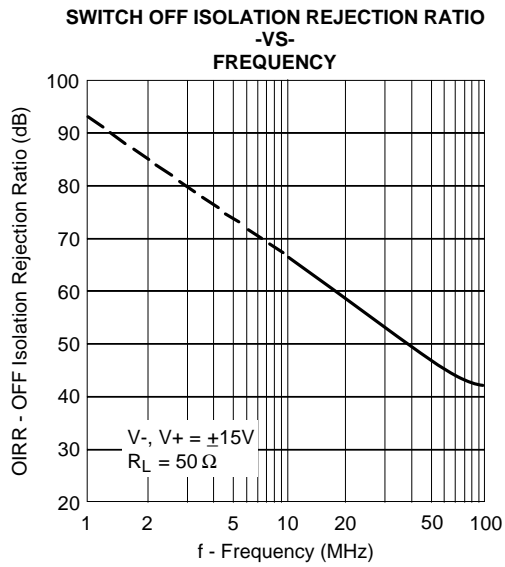
FUNCTION TABLE

ENABLE	A ₀	A ₁	CHANNEL
H	x	x	OFF
L	L	L	S ₁
L	H	L	S ₂
L	L	H	S ₃
L	H	H	S ₄

X = Undefined

All devices contain diodes to protect inputs against damage due to high static voltages or electric fields; however, it is advised that precautions be taken not to exceed the maximum recommended input voltages. All unused inputs must be connected to an appropriate logic level (either V_{cc} or GND).

TYPICAL PERFORMANCE CHARACTERISTICS ($T_A = +25^\circ\text{C}$ unless otherwise specified)



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