



MICRO POWER SYSTEMS INC

MP7508DI

T-51-11

CMOS 8-CHANNEL ANALOG MULTIPLEXERS

FEATURES

- Latch-Proof
- Overvoltage Protected
- DTL/TTL/CMOS Direct Interface
- Power Dissipation: 30μW
- Silicon-Nitride Passivated
- Output "Enable" Control
- Low Power
- Replaces DG508 and HI508A

GENERAL DESCRIPTION

The MP7508 is a monolithic, CMOS 8-channel analog multiplexer. Depending on the state of three binary address lines and an "enable" input, it switches a common output to one of 8 inputs.

Very low power dissipation, overvoltage protection and TTL/CMOS direct interfacing are achieved by combining a unique circuit design and a CMOS process. Silicon nitride passivation ensures long term stability while monolithic construction provides reliability.

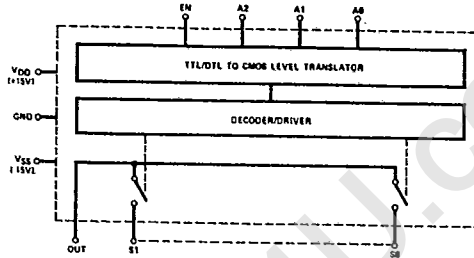
ABSOLUTE MAXIMUM RATINGS

(T_A=+25°C unless otherwise noted.)

- V_{DD} to GND +17V
- V_{SS} to GND -17V
- Overvoltage at V_O (V_S)
 - 1 second surge V_{DD}+25V or (V_{SS}-25V)
 - Continuous V_{DD}+20V or (V_{SS}-20V)
- Switch Current (I_S, Continuous) 35 mA
- Switch Current (I_S, Surge)
 - 1mS duration, 10% duty cycle 50 mA
- Power Dissipation (Package)*
 - 16 Pin Ceramic DIP** 900mW
 - 16 Pin Plastic DIP*** 470mW
- Operating Temperature
 - Plastic (KN) 0°C to +70°C
 - Ceramic (KD) -25°C to +85°C
 - Ceramic (SD) -55°C to +125°C
- Storage Temperature -65°C to +150°C

* Device mounted with all leads soldered or welded to PC board
 ** Derate 12 mW/°C above +75°C
 *** Derate 6.5 mW/°C above +25°C

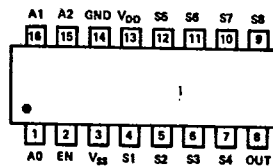
FUNCTIONAL DIAGRAM



TRUTH TABLE

MP7508				
A ₂	A ₁	A ₀	E _N "ON"	
0	0	0	1	1
0	0	1	1	2
0	1	0	1	3
0	1	1	1	4
1	0	0	1	5
1	0	1	1	6
1	1	0	1	7
1	1	1	1	8
X	X	X	0	None

PIN CONFIGURATION (Top View)



See Section 7 for Ordering Information

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