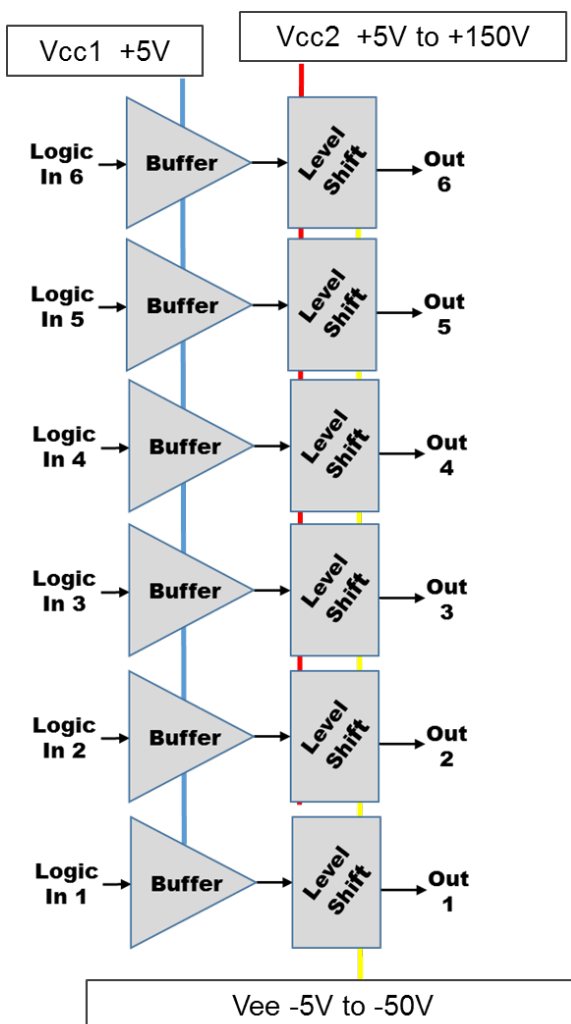


GENERAL DESCRIPTION

The 9892 is a 6 channel driver suitable for high voltage MEMS, Piezo or PIN diode switch applications.

The 9892 accepts standard TTL and CMOS logic, and level shifts them to +/- voltage levels. The 9892 is specially designed to drive high voltage low current loads like MEMS, Piezo devices, and back biased PIN diodes.

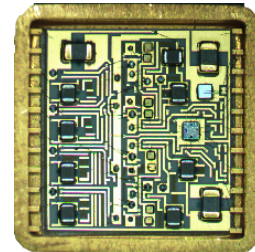
FUNCTION BLOCK DIAGRAM



MECHANICAL

The 9892 is housed in an all metal gold over nickel plated hermetic housing with internal chip & wire construction, on alumina substrate and TaN resistors.

It is designed for integration into a hermetic module which operates in harsh environments of high temperature and vibration.



PIN CONNECTIONS

- 1 Vneg -50V
- 2 Input 1
- 3 NC
- 4 Output 1
- 5 Input 2
- 6 NC
- 7 Output 2
- 8 Input 3
- 9 NC
- 10 Output 3
- 11 Vpos2 +150V
- 12 Vpos1 +5V
- 13 Input 4
- 14 NC
- 15 Output 4
- 16 Input 5
- 17 NC
- 18 Output 5
- 19 Input 6
- 20 NC
- 21 Output 6
- 22 Ground

TRUTH TABLE

IN N OUT N

0	-VEE + .5V
1	+VCC - .5V

ELECTRICAL SPECIFICATIONS

Vpos1 +5V, Vpos2 +150V, Vneg -50V, TEMP 25C, PRR 1KHz

NOTE: Tie all unused inputs high or low, but not floating.

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
ABSOLUTE MAXIMUMS						
Vpos	Logic Supply Positive		0		+7	V
Vneg	Supply Voltage Negative		-32		0	V
To	Operating Temperature		-54		+105	Deg C
Ts	Storage Temperature		-65		+150	Deg C
INPUT						
VI_hi	Voltage Input High	TTL/CMOS	2.8	4.5	5.5	V
VI_low	Voltage Input Low	TTL/CMOS	0	.5	1.8	V
OUTPUT						
VO_hi	Voltage Out High	open load	4.0	4.2	4.8	V
VO_low	Voltage Out Low	open load	-26.8	-27.0	-27.5	V
IO_hi	Current Out High	steady state into 1V diode load		200	250	mA
IO_low	Current Out Low	steady state into 1V diode load		150		mA
lopk	Current Peak Output	sink		1		A
SUPPLY						
IQC_pos	Quiescent Current Positive	100KHz 50% duty cycle		10		mA
IQC_neg	Quiescent Current Negative	100KHz 50% duty cycle		5		mA
DYNAMIC						
Trise	Time Rise	47pF +200mA resistive and cathode GND PIN diode array		25		nS
Tfall	Time Fall	47pF +200mA resistive and cathode GND PIN diode array		25		nS
Td_rise	Delay Rise	47pF +200mA resistive and cathode GND PIN diode array		50		nS
Td_fall	Delay Fall	47pF +200mA resistive and cathode GND PIN diode array		50		nS
TSW_rise	Switching Speed Rise	47pF +200mA resistive and cathode GND PIN diode array		100		nS
TSW_fall	Switching Speed Fall	47pF +200mA resistive and cathode GND PIN diode array		100		nS
PRR	Pulse Repetition Rate	47pF +200mA resistive and cathode GND PIN diode array		150		KHz

MECHANICAL SPECIFICATIONS

"DRAWING NOT TO SCALE. DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED."

Package Code 5
 Leadform: Q3569
 Type: Housing; Lead Finish: Gold
 Length .645 in MAX; Width .645 in MAX; Height .135 in MAX

MARKING SPECIFICATIONS

Logo: Impellimax
 Part Number: 9892

