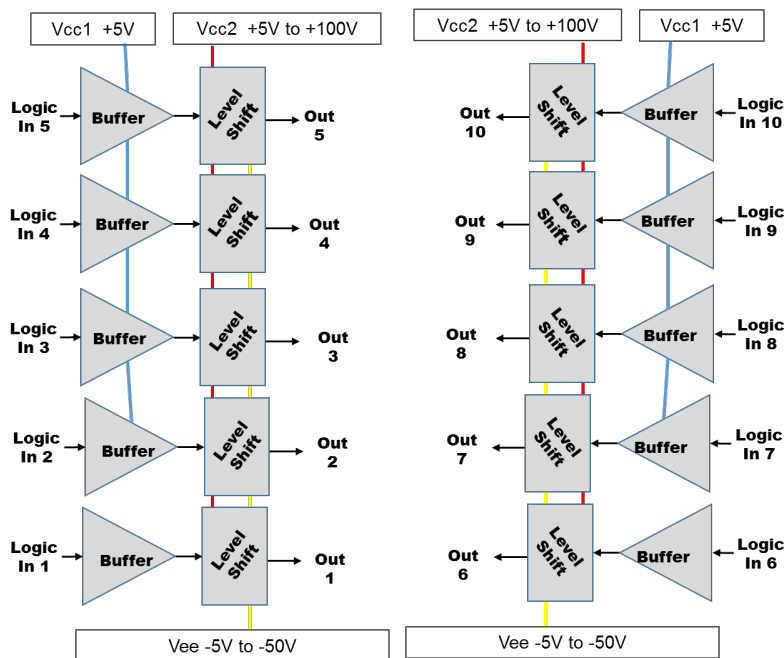


GENERAL DESCRIPTION

The 9885 is a 10 channel high voltage driver that level shifts standard complementary logic into down to $-50V$ and up to $+100V$ suited to drive MEMS or PIN diodes.

The 9885 has a TTL buffer stage, a level shift, and an output buffer.

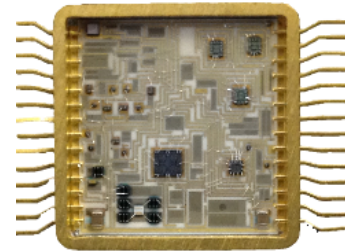
FUNCTION BLOCK DIAGRAM



MECHANICAL

The 9885 is housed in a 28 lead hermetic gold-plated metal package. Leads are available in gold plated flat leads or solder dipped formed leads.

They are designed for operation in harsh environments.



PIN CONNECTIONS

1 Vneg	15 Vpos1
2 Ground	16 Ground
3 Output 1	17 Output 6
4 Input 1	18 Input 6
5 Output 2	19 Output 7
6 Input 2	20 Input 7
7 Output 3	21 Output 8
8 Input 3	22 Input 8
9 Output 4	23 Output 9
10 Input 4	24 Input 9
11 Output 5	25 Output 10
12 Input 5	26 Input 10
13 Ground	27 Ground
14 Vpos2	28 Vneg

TRUTH TABLE

IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8	IN9	IN10	OUT1	OUT2	OUT3	OUT4	OUT5	OUT6	OUT7	OUT8	OUT9	OUT10
0	1	1	1	1	1	1	1	1	1	-V	+V	+V	+V	+V	+V	+V	+V	+V	+V
1	0	1	1	1	1	1	1	1	1	+V	-V	+V	+V	+V	+V	+V	+V	+V	+V
1	1	0	1	1	1	1	1	1	1	+V	+V	-V	+V	+V	+V	+V	+V	+V	+V
1	1	1	0	1	1	1	1	1	1	+V	+V	+V	-V	+V	+V	+V	+V	+V	+V
1	1	1	1	0	1	1	1	1	1	+V	+V	+V	+V	-V	+V	+V	+V	+V	+V
1	1	1	1	1	0	1	1	1	1	+V	+V	+V	+V	+V	-V	+V	+V	+V	+V
1	1	1	1	1	1	0	1	1	1	+V	+V	+V	+V	+V	+V	-V	+V	+V	+V
1	1	1	1	1	1	1	0	1	1	+V	+V	+V	+V	+V	+V	+V	-V	+V	+V
1	1	1	1	1	1	1	1	0	1	+V	+V	+V	+V	+V	+V	+V	+V	-V	+V
1	1	1	1	1	1	1	1	1	0	+V	+V	+V	+V	+V	+V	+V	+V	+V	-V

ELECTRICAL SPECIFICATIONS

Vpos1 +5V, Vpos2 +100V, 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		+110	V
Vneg	Supply Voltage Negative		-75		0	V
To	Operating Temperature		-54		+125	Deg C
Ts	Storage Temperature		-65		+150	Deg C
INPUT						
VI_hi	Voltage Input High		2.8			V
VI_low	Voltage Input Low				.8	V
OUTPUT						
VO_hi	Voltage Out High	open circuit	+99.0	+99.5	+99.8	V
VO_low	Voltage Out Low	open circuit	-49.8	-49.5	-49.2	V
IO_hi	Current Out High	PIN diode load forward bias		+20		mA
IO_low	Current Out Low	PIN diode load back bias		-20		mA
lopk	Current Peak Output	sink and source		85		mA
SUPPLY						
IQC_pos	Quiescent Current Positive			8		mA
IQC_neg	Quiescent Current Negative			7		mA
DYNAMIC						
Trise	Time Rise			.5		uS
Tfall	Time Fall			.5		uS
Td_rise	Delay Rise			10		uS
Td_fall	Delay Fall			10		uS
TSW_rise	Switching Speed Rise	50pF load		20		uS
TSW_fall	Switching Speed Fall	50pF load		20		uS
PRR	Pulse Repetition Rate	Max, 10pF load		1		KHz

MECHANICAL SPECIFICATIONS

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

Type: Housing; Lead Finish: Gold

Length .760 in MAX; Width .760 in MAX; Height .140 in MAX

MARKING SPECIFICATIONS

Logo: Impellimax

Part Number: 9885

