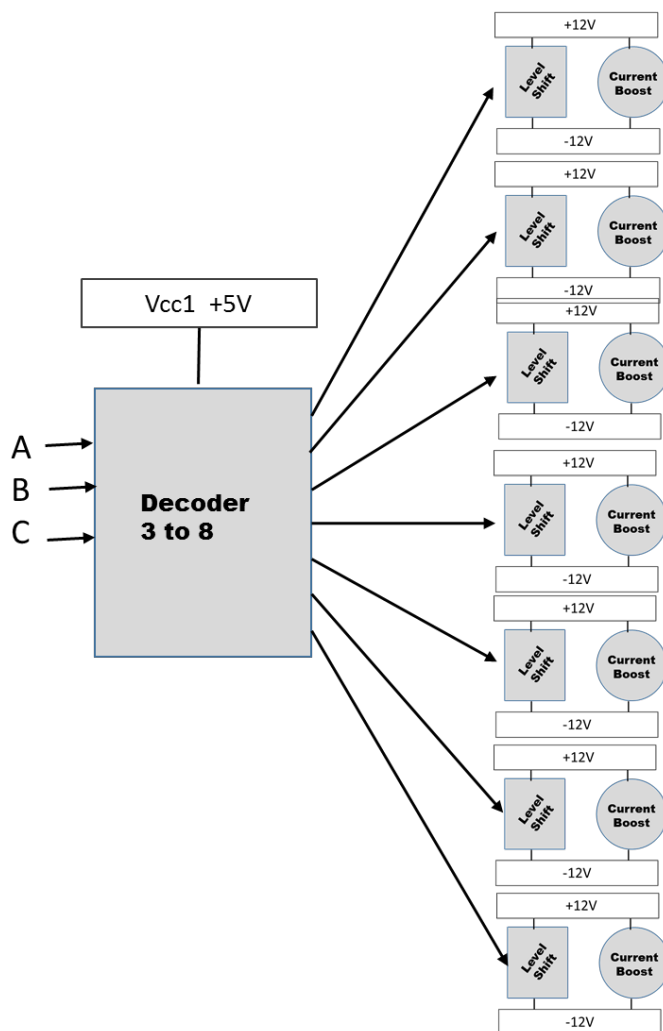


GENERAL DESCRIPTION

The 9797 is a 7 channel driver suitable for high power PIN diode switch applications.

The 9797 accepts standard TTL and CMOS logic, and level shifts them to +/- voltage levels up to +/-15V and +/-40 mA out. The 9797 is specially designed to drive a series diode configuration.

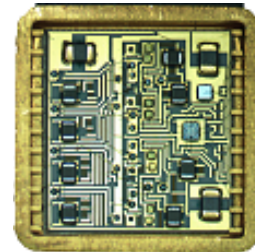
FUNCTION BLOCK DIAGRAM



MECHANICAL

The 9797 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	+5V
2	A
3	B
4	C
5	NC
6	Ground
7	NC
8	NC
9	+12V
10	NC
11	-12V
12	Output 7
13	Output 6
14	NC
15	Output 5
16	NC
17	Output 4
18	NC
19	Output 3
20	Output 2
21	Output 1
22	NC

TRUTH TABLE

A	B	C	OUT1	OUT2	OUT3	OUT4	OUT5	OUT6	OUT7
0	0	0	-V	-V	-V	-V	-V	-V	-V
0	0	1	+V	-V	-V	-V	-V	-V	-V
0	1	0	-V	+V	-V	-V	-V	-V	-V
0	1	1	-V	-V	+V	-V	-V	-V	-V
1	0	0	-V	-V	-V	+V	-V	-V	-V
1	0	1	-V	-V	-V	-V	+V	-V	-V
1	1	0	-V	-V	-V	-V	-V	+V	-V
1	1	1	-V	-V	-V	-V	-V	-V	+V

ELECTRICAL SPECIFICATIONS

Vpos1 +5V, Vpos2 +12V, Vneg -12V, TEMP 25C, PRR 1KHz

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
ABSOLUTE MAXIMUMS						
Vpos1	Logic Supply Positive				+7	V
Vpos2	Positive Output Supply				+15	V
Vneg	Output Supply Negative				-15	V
Vpos to Vneg	Positive to Negative Supply Voltage				35	V
To	Operating Temperature		-54		+125	Deg C
Ts	Storage Temperature		-65		+150	Deg C
INPUT						
VI_hi	Voltage Input High		1.8	2.5	5	V
VI_low	Voltage Input Low		0	.5	1.8	V
OUTPUT						
VO_hi	Voltage Out High	open load	11.2	11.5	11.9	V
VO_low	Voltage Out Low	open load	-11.0	-11.4	-11.9	V
IO_hi	Current Out High	steady state **(see note)		+40		mA
IO_low	Current Out Low **(see note)	steady state **(see note)		-40		mA
lopk	Current Peak Output	sink		-1.6		A
SUPPLY						
IQC_pos	Quiescent Current Positive	10KHz 50% duty cycle		8		mA
IQC_neg	Quiescent Current Negative	10KHz 50% duty cycle		8		mA
DYNAMIC						
Trise	Time Rise	800pF & diode load		250		nS
Tfall	Time Fall	800pF & diode load		100		nS
Td_rise	Delay Rise	800pF & diode load		100		nS
Td_fall	Delay Fall	800pF & diode load		500		nS
TSW_rise	Switching Speed Rise	800pF & diode load		350		nS
TSW_fall	Switching Speed Fall	800pF & diode load		350		nS
PRR	Pulse Repetition Rate	Max, 100pF load		10		KHz

** External current limiting is needed to prevent overload and failure. Driver intended to supply 40 mA output.

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: 9797

