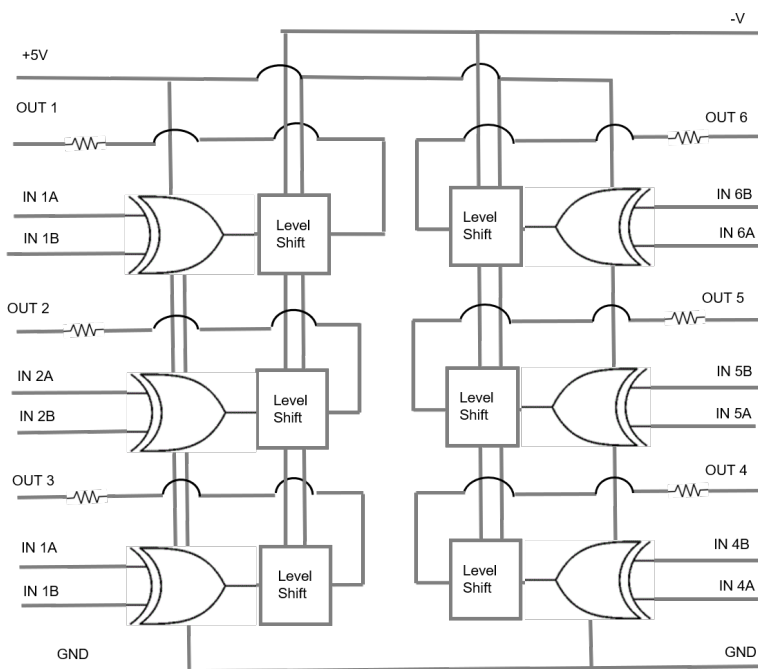


GENERAL DESCRIPTION

The 9620 is a 6 channel driver suitable for high speed PIN diode switch applications.

The 9620 accepts standard TTL and CMOS logic, and level shifts them to +/- voltage levels. The 9620 is specially designed to drive nominally 20 mA into diode or diode/resistive load

FUNCTION BLOCK DIAGRAM



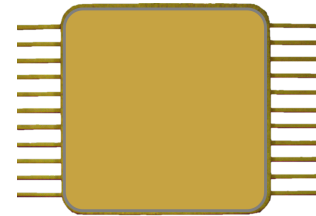
MECHANICAL

The 9620 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.

ECCN Code EAR99

9620 is RoHS 3 (EU 2015/863) compliant.



PIN CONNECTIONS

each driver channel has mode control

- 1 +5 VDC
- 2 Output 1
- 3 Input 1A
- 4 Input 1B
- 5 Output 2
- 6 Input 2A
- 7 Input 2B
- 8 Output 3
- 9 Input 3A
- 10 Input 3B
- 11 Ground
- 12 Ground
- 13 Input 4A
- 14 Input 4B
- 15 Output 4
- 16 Input 5A
- 17 Input 5B
- 18 Output 5
- 19 Input 6A
- 20 Input 6B
- 21 Output 6
- 22 -V (-5V to -15V)

TRUTH TABLE

INN A INN B OUTN

0	0	-V
1	0	+V
0	1	+V
1	1	-V

ELECTRICAL SPECIFICATIONS

Vpos1 +5V, Vneg -15V, 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		-16		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	1.2	V
OUTPUT							
	VO_hi	Voltage Out High	open load	4.0	4.2	4.8	V
	VO_low	Voltage Out Low	open load	-14.0	-14.3	-15	V
	IO_hi	Current Out High	steady state into 1V diode load +/-5V	16	20	25	mA
	IO_low	Current Out Low	steady state into 1V diode load +/-5V	-16	-20	-25	mA
	Iopk	Current Peak Output	sink		1		A
SUPPLY							
	IQC_pos	Quiescent Current Positive	100KHz 50% duty cycle		55		mA
	IQC_neg	Quiescent Current Negative	100KHz 50% duty cycle		30		mA
DYNAMIC							
	Trise	Time Rise	47pF +200mA resistive and cathode GND PIN diode array		10		nS
	Tfall	Time Fall	47pF +200mA resistive and cathode GND PIN diode array		10		nS
	Td_rise	Delay Rise	47pF +200mA resistive and cathode GND PIN diode array		25		nS
	Td_fall	Delay Fall	47pF +200mA resistive and cathode GND PIN diode array		25		nS
	TSW_rise	Switching Speed Rise	47pF +200mA resistive and cathode GND PIN diode array		40		nS
	TSW_fall	Switching Speed Fall	47pF +200mA resistive and cathode GND PIN diode array		40		nS
	PRR	Pulse Repetition Rate	47pF +200mA resistive and cathode GND PIN diode array		250		KHz

ESD Sensitivity HBM Class 1B

MECHANICAL SPECIFICATIONS

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

Package Code 5

Type: Housing; Lead Finish: Gold

Length .645 in MAX; Width .645 in MAX; Height .135 in MAX

MARKING SPECIFICATIONS

Logo: Impellimax

Part Number: 9620

