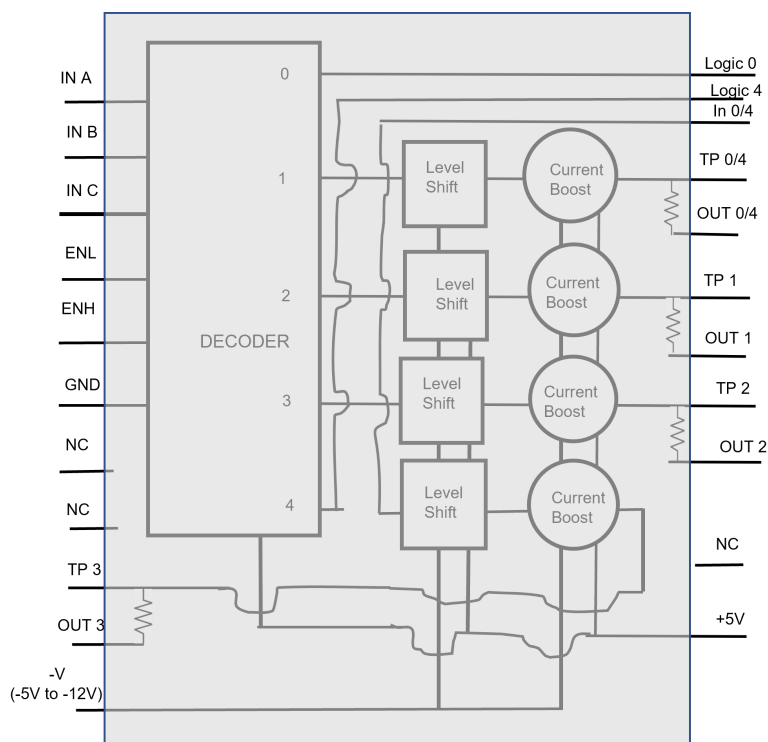


GENERAL DESCRIPTION

The DF420A5 is decoded with enable 4 channel output driver suitable for multi-throw PIN diode switches.

The DF420A5 accepts TTL or CMOS logic. It was designed to supply current both from positive and negative supply as is needed in series shunt configuration. It is also usable for all series or all shunt switching. Driver will supply +/-40 mA into a PIN diode load.

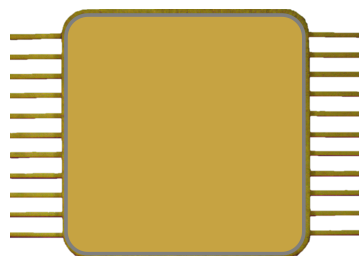
FUNCTION BLOCK DIAGRAM



MECHANICAL

The DF420A5 is a .625 x .625" hermetic glass seal assembly with alumina substrate and chip & wire construction. It is designed for integration into a hermetic module which operates in harsh environments of high temperature and vibration.

The DF420A5 contains no solder and is RoHS compliant.



PIN CONNECTIONS

- 1 Input A
- 2 Input B
- 3 Input C
- 4 Enable (low)
- 5 Enable (high)
- 6 Ground
- 7 NC
- 8 NC
- 9 Testpoint 3
- 10 Output 3
- 11 -5V to -12V
- 12 +5V
- 13 NC
- 14 Testpoint 2
- 15 Output 2
- 16 Testpoint 1
- 17 Output 1
- 18 Output 0/4
- 19 Testpoint 0/4
- 20 Input 0/4
- 21 Logic 4
- 22 Logic 0

TRUTH TABLE

Vpos = +5V Vneg = -5V TTL In

INA	INB	INC	ENL	ENH	OUT1	OUT2	OUT3	OUT0/4
0	0	0	0	1	-mA	+mA	+mA	+mA
0	1	0	0	1	+mA	-mA	+mA	+mA
1	0	0	0	1	-mA	+mA	-mA	+mA
1	1	0	0	1	+mA	-mA	+mA	-mA
X	X	X	1	0	+mA	+mA	+mA	+mA

ELECTRICAL SPECIFICATIONS

Vpos +5V, Vneg -12V, TEMP 25C, PRR 2MHz

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		-15		0	V
To	Operating Temperature		-54		+125	Deg C
Ts	Storage Temperature		-65		+150	Deg C
INPUT						
VI_hi	Voltage Input High	TTL	2.8	3.5	5	V
VI_low	Voltage Input Low	TTL	0	.8	1.8	V
OUTPUT						
VO_hi	Voltage Out High	open load	4.2	4.5	4.8	V
VO_low	Voltage Out Low	open load	-11.8	-11.5	-11.2	V
IO_hi	Current Out High	steady state into 1V diode load		40		mA
IO_low	Current Out Low	steady state into 1V diode load		-40		mA
lopk	Current Peak Output	sink		-180		mA
SUPPLY						
IQC_pos	Quiescent Current Positive	1MHz 50% duty cycle		35		mA
IQC_neg	Quiescent Current Negative	1MHz 50% duty cycle		5		mA
DYNAMIC						
Trise	Time Rise			5		nS
Tfall	Time Fall			5		nS
Td_rise	Delay Rise			10		nS
Td_fall	Delay Fall			10		nS
TSW_rise	Switching Speed Rise	5pF load		15		nS
TSW_fall	Switching Speed Fall	5pF load		15		nS
PRR	Pulse Repetition Rate	Max, 5pF load		2		MHz

MECHANICAL SPECIFICATIONS

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

Package Code L

Type: Housing; Lead Finish: Gold

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

MARKING SPECIFICATIONS

Part Number: DF420A5

Date Code: YYWW

