

GENERAL DESCRIPTION

The DF425ASM is a decoded with enable 4 channel output driver suitable for multi-throw PIN diode switches.

The DF425ASM 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 +/- 25 mA into a PIN diode load.

FUNCTION BLOCK DIAGRAM

AVAILABLE UPON REQUEST

MECHANICAL

The DF425ASM is a .411 x .411" alumina substrate assembly with gold bond pads for integration into a chip & wire construction, either open or optionally covered with alumina cover. It is designed for integration into a hermetic module which operates in harsh environments of high temperature and vibration.

The DF425ASM contains no solder and is RoHS compliant.

PIN CONNECTIONS

- 1 Output 3
- 2 Output 2
- 3 Output 1
- 4 Output 0
- 5 +5V
- 6 Input A
- 7 Input B
- 8 Enable
- 9 Ground
- 10 -5V

TRUTH TABLE $V_{pos} = +5V$ $V_{neg} = -5V$ TTL In

INA	INB	EN	OUT0	OUT1	OUT2	OUT3
0	0	0	-25mA	+25mA	+25mA	+25mA
0	1	0	+25mA	-25mA	+25mA	+25mA
1	0	0	+25mA	+25mA	-25mA	+25mA
1	1	0	+25mA	+25mA	+25mA	-25mA
X	X	1	+25mA	+25mA	+25mA	+25mA

ELECTRICAL SPECIFICATIONS $V_{pos} +5V$, $V_{neg} -5V$, TEMP 25C, PRR 1MHZ

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
ABSOLUTE MAXIMUMS						
V_{pos}	Logic Supply Positive		0		+7	V
V_{neg}	Supply Voltage Negative		-12		0	V
T_o	Operating Temperature		-54		+125	Deg C
T_s	Storage Temperature		-65		+150	Deg C
INPUT						
V_{I_hi}	Voltage Input High	TTL	2.8	3.5	5	V
V_{I_low}	Voltage Input Low	TTL	0	.8	1.8	V
OUTPUT						
V_{O_hi}	Voltage Out High	open load	4.2	4.5	4.8	V
V_{O_low}	Voltage Out Low	open load	-4.8	-4.5	-4.2	V
I_{O_hi}	Current Out High	steady state into 1V diode load		25		mA
I_{O_low}	Current Out Low	steady state into 1V diode load		-25		mA
lopk	Current Peak Output	sink		-80		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."

Electro-less Gold Substrate

Bondable Gold Pad Finish

Type: Substratable

Length .411 in; Width .411 in; Height .055 in; Weight .1 grams

MARKING SPECIFICATIONS

Part Number: DF425ASM

