

GENERAL DESCRIPTION

The 99182 is a driver featuring high speed and wide negative voltage range suited for driving high speed PIN diode switches.

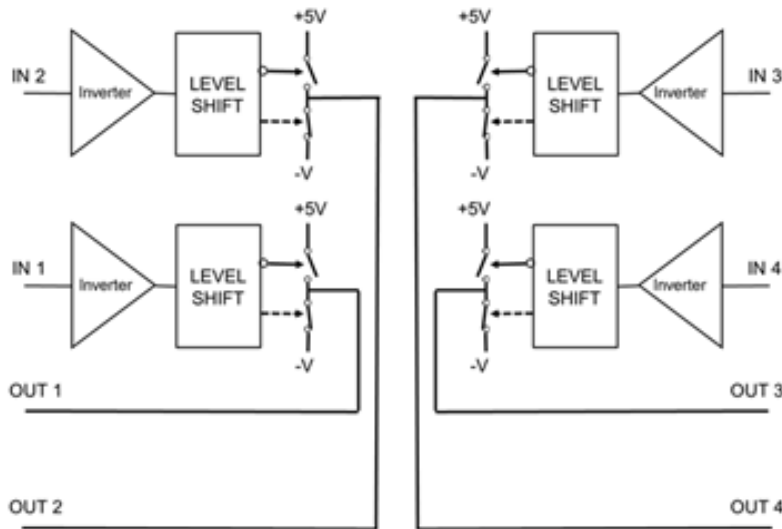
The driver is compatible with 5.0 V CMOS logic and has 4 independent channels outputs to supply output high and low up to +/-100 mA operating at +5V and -200V.

External current limiting resistors are required to set current.

FEATURES

- High speed <250 nS
- Operates -5 to -200V - supply

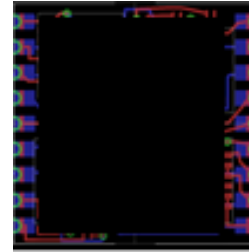
FUNCTION BLOCK DIAGRAM



MECHANICAL

The 99182 consists of silicon BJT and MOSFET array mounted to a laminate substrate and sealed with a dam and fill process. This forms a 12x12 mm 18 pos SMT assembly designed for integration into an integrated microwave assembly.

99182 contains no solder and is RoHS compliant.



PIN CONNECTIONS

Recommend bypassing +5V and Vneg with .1 uF capacitor or .01 uF minimum.

- 1 NC
- 2 Input 2
- 3 Ground
- 4 Input 1
- 5 -15V to -200V
- 6 Ground
- 7 Output 1
- 8 +5V
- 9 Output 2
- 10 NC
- 11 +5V
- 12 Output 4
- 13 Output 3
- 14 -15V to -200V
- 15 Input 4
- 16 Ground
- 17 Input 3
- 18 NC

TRUTH TABLE

IN1	IN2	IN3	IN4	OUT1	OUT2	OUT3	OUT4
1	1	1	1	+V	+V	+V	+V
0	1	1	1	-V	+V	+V	+V
1	0	1	1	+V	-V	+V	+V
1	1	0	1	+V	+V	-V	-V
1	1	1	0	+V	+V	+V	-V
0	0	0	0	-V	-V	-V	-V

ELECTRICAL SPECIFICATIONS

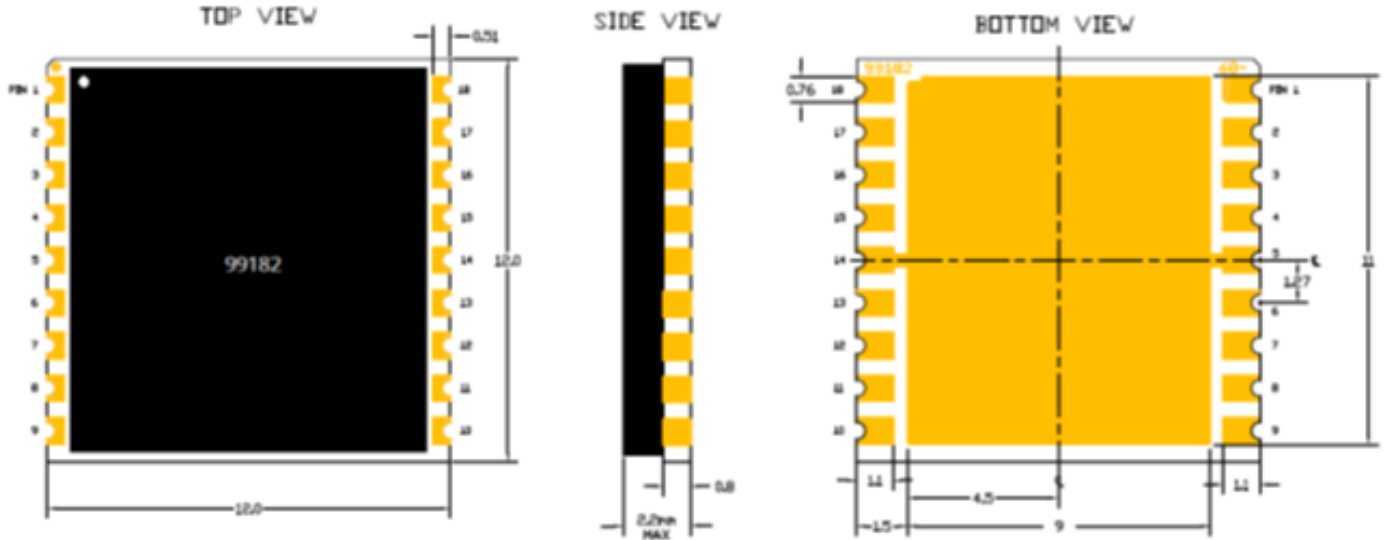
Vpos +5V, Vneg -200V, TEMP 25C, PRR 50KHz

	SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT							
	VI_hi	Voltage Input High	CMOS	4.0	4.5	5.0	V
	VI_low	Voltage Input Low	CMOS	0	.4	.8	V
OUTPUT							
	VO_hi	Voltage Out High	open load	4.0	4.5	5.0	V
	VO_low	Voltage Out Low	open load	-189.8	-199.2	-199.8	V
	IO_hi	Current Out High	steady state into 1V diode load		100		mA
	IO_low	Current Out Low	steady state into 1V diode load common arm resistor		-100		mA
	lopk	Current Peak Output	sink and source		500		mA
SUPPLY							
	IQC_pos	Quiescent Current Positive	5KHz 50% duty cycle		15		mA
	IQC_neg	Quiescent Current Negative	5KHz 50% duty cycle		10		mA
DYNAMIC							
	Trise	Time Rise			35		nS
	Tfall	Time Fall			30		nS
	Td_rise	Delay Rise			65		nS
	Td_fall	Delay Fall			60		nS
	TSW_rise	Switching Speed Rise	100pF load		250		nS
	TSW_fall	Switching Speed Fall	100pF load		250		nS
	PRR	Pulse Repetition Rate	Max, 10pF load		50		KHz

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

MARKING SPECIFICATIONS

Part Number: 99182



FOOTPRINT

