

IX Series Extremely Fast Inverting PIN Driver

DESCRIPTION

Extremely fast inverting drivers with low quiescent current consumption and low TTL loading.

These drivers provide steady-state output current with current spikes for fast PIN and NIP switching.

Test points are provided to allow tailoring of output currents and spikes to particular applications. Internal current limiting assures that short-term accidental short-circuits to these test points will usually not damage driver.

Low input capacitance and logic current make these drivers TTL, LSTTL, High Speed CMOS, and NMOS compatible. These circuits have high gain, making them relatively insensitive to radiation.

These drivers have integral reverse bias protection and contain internal .01 μ F bypass capacitors on both supply inputs. All TTL inputs are ESD protected.

Screening to MIL-STD-883 available.

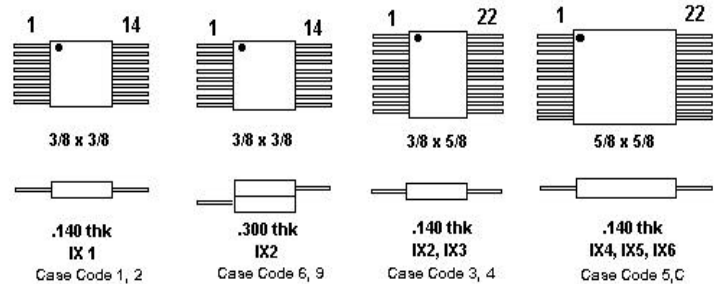
FEATURES

- Extremely High Speed Switching
- Very Low Quiescent Supply Current, Stable vs. VEE.
- Compatible with TTL, LSTTL, HCT, CMOS
- Internal .01 μ F Bypass Capacitors
- Testpoints are Short Circuit Protected.

ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS
Positive Voltage	V+	4.5	5	5.5	V
Negative Voltage	A V-	-2	--	-12	V
	B V-	-2	--	-16	V
Pos. Current (no load)	IQ+	--	3.6	5	mA/Channel
Neg. Current (no load)	IQ-	--	3.6	5	mA/Channel
Switching Speed	Tsw	--	5	8	nsec
TTL Sink Current	I TTL 0	--	0.3	1.4	mA

OUTLINES



PIN CONNECTIONS

PIN	IX1	IX2 (6,9)	IX2 (3,4)	IX3	IX4	IX5	IX6
1	VEE	VEE	VEE	VEE	VEE	VEE	VEE
2	Output	Out 1	IN1	IN1	IN1	IN1	IN1
3	GND	GND	TP1	TP1	TP1	TP1	TP1
4	Input	IN1	Out 1	IN2	Out 1	Out 1	Out 1
5	NC	NC	IN2	TP2	IN2	IN2	IN2
6	NC	NC	TP2	Out 2	TP2	TP2	TP2
7	+5V	+5V	Out 2	IN3	Out 2	Out 2	Out 2
8	NC	+5V	NC	TP3	IN3	IN3	IN3
9	NC	NC	NC	Out 3	TP3	TP3	TP3
10	NC	NC	+5V	+5V	Out 3	Out 3	Out 3
11	TP	IN2	GND	GND	+5V	+5V	+5V
12	NC	GND	NC	NC	VEE	VEE	VEE
13	NC	Out 2	NC	NC	IN4	IN4	IN4
14	NC	VEE	NC	NC	TP4	TP4	TP4
15	NC	NC	NC	NC	Out 4	Out 4	Out 4
16	NC	NC	NC	NC	NC	IN5	IN5
17	NC	NC	NC	NC	NC	TP5	TP5
18	NC	NC	NC	NC	NC	Out 5	Out 5
19	NC	NC	NC	NC	NC	NC	IN6
20	NC	NC	NC	NC	NC	NC	TP6
21	NC	NC	NC	NC	NC	NC	Out 6
22	NC	NC	GND	GND	GND	GND	GND

OUTPUT CURRENTS

The following nominal positive output currents are available:
5, 10, 15, 20, 25, 30, 40, 50, 60, 70 mA.

Negative output current is of equal magnitude at -5V, and increases linearly with increasing negative bias.