

**OKI Semiconductor****MSL912**

OKI SEMICONDUCTOR GROUP

8-BIT PARALLEL-IN PARALLEL-OUT

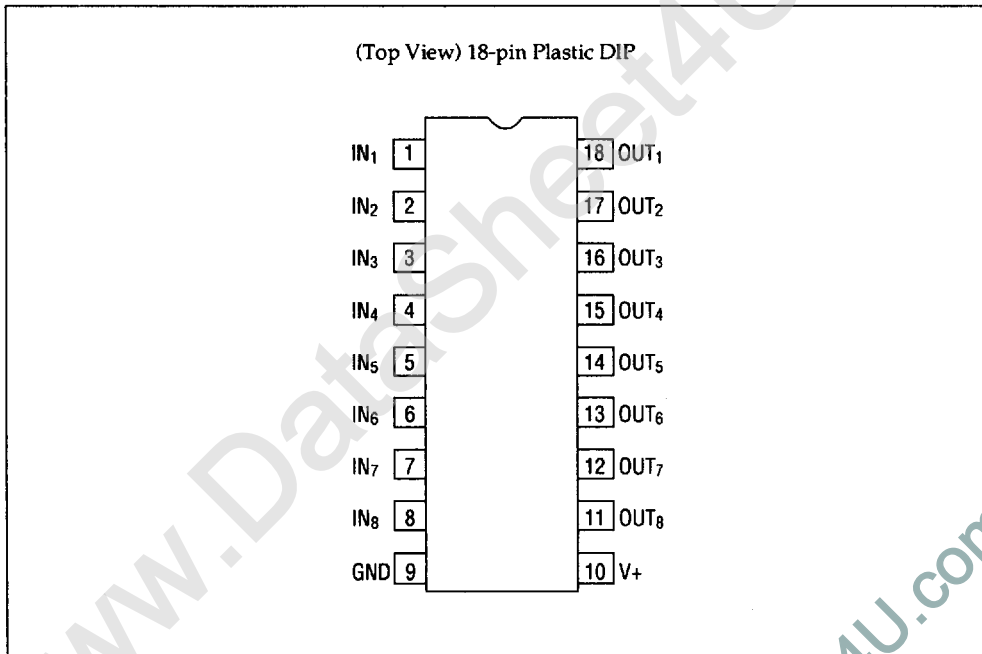
T-52-13-09

**GENERAL DESCRIPTION**

The MSL912 is a high voltage vacuum fluorescent display tube driver, which uses positive voltage and contains eight circuits. Each output contains a pull-down resistor, which allows the driver to directly drive the vacuum fluorescent display tube.

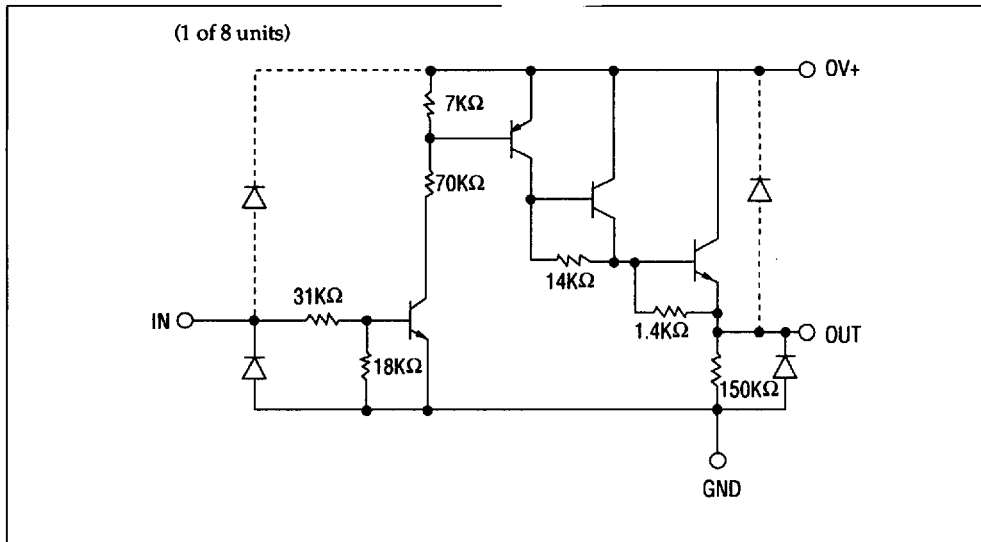
Input may be driven directly by the TTL or CMOS.

- 18-pin Plastic DIP (DIP 18-P-300)

**PIN CONFIGURATION**

## CIRCUIT CONFIGURATION

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## ELECTRICAL CHARACTERISTICS

## • Absolute Maximum Ratings

Parameter	Symbol	Condition	Limits	Unit
Supply voltage	V+	Ta=25°C	-0.3 ~ 35	V
Input voltage	V <sub>i</sub>	Ta=25°C	-0.5 ~ 10	V
Output voltage	V <sub>o</sub>	Ta=25°C	-0.3 ~ 35	V
Output current	I <sub>o</sub>	Ta=25°C, only one circuit ON	+0.6 ~ -45	mA
Storage temperature	T <sub>stg</sub>	-	-55 ~ +150	°C

## • Recommended Operating Conditions

Parameter	Symbol	Condition	Limits	Unit
Supply voltage	V+	-	15 ~ 30	V
Input voltage	V <sub>i</sub>	-	0 ~ 7	V
Output current	I <sub>o</sub>	Only one circuit ON*	+0.5 ~ -40	mA
		Per circuit when all circuits are ON*	+0.5 ~ -5	mA
		Total output current*	+0.5 x 8 ~ -40	mA
Operating temperature	T <sub>op</sub>	-	-30 ~ +75	°C

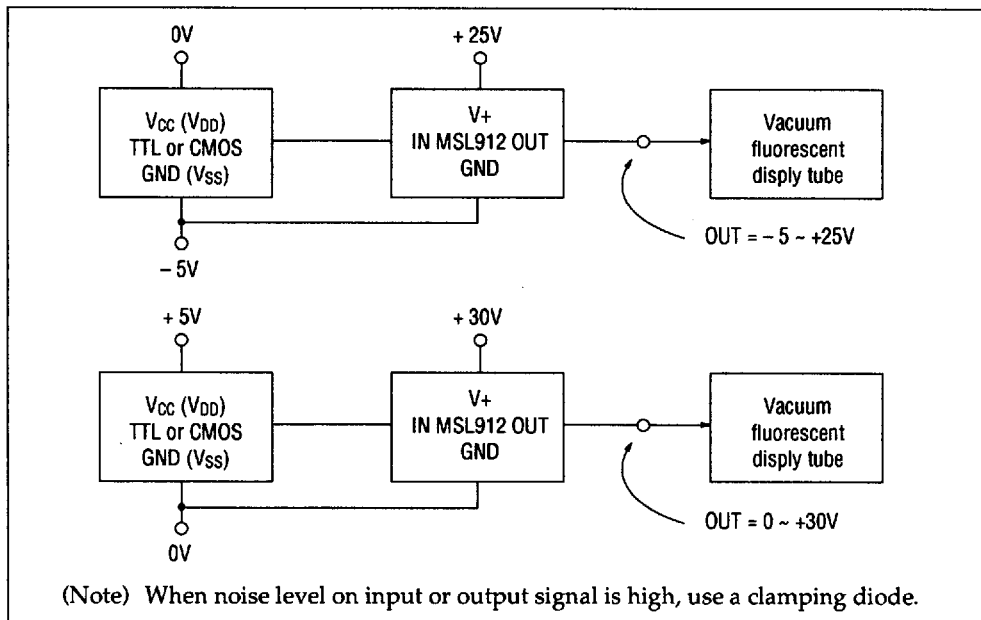
\* Duty: 50% max.

• DC Characteristics ○ K I SEMICONDUCTOR GROUP

(Ta = -30 ~ +75°C, TYP: Ta = 25°C)

Parameter	Symbol	Condition			Specification			Unit
		V+ (V)	Vi (V)	IO (mA)	MIN	TYP	MAX	
High input voltage	V <sub>IH</sub>	30	-	-	2.5	-	-	V
Low input voltage	V <sub>IL</sub>	30	-	-	-	-	1.0	V
Low input current	I <sub>IL</sub>	30	1.0	-	-	20	80	μA
High input current	I <sub>IH1</sub>	30	2.5	-	-	0.09	0.22	mA
	I <sub>IH2</sub>	30	7	-	-	0.29	0.7	mA
High output voltage	V <sub>OH</sub>	30	2.5	-40	27	28.5	-	V
Low output voltage	V <sub>OL</sub>	30	1.0	0	-	1.0	3.0	V
Supply current	I <sub>CC OFF</sub>	30	ALL INPUTS 1.0	0	-	0.04	0.4	mA
	I <sub>CC ON</sub>	30	ALL INPUTS 2.5	0	-	12	17	mA
Pull-down resistor	R <sub>PD</sub>	30	ALL INPUTS 0	V <sub>O</sub> =27V	60	150	270	kΩ

APPLICATION NOTE



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