OKI Semiconductor T-52-13-09

MSL918

8-BIT PARALLEL-IN PARALLEL-OUT

GENERAL DESCRIPTION

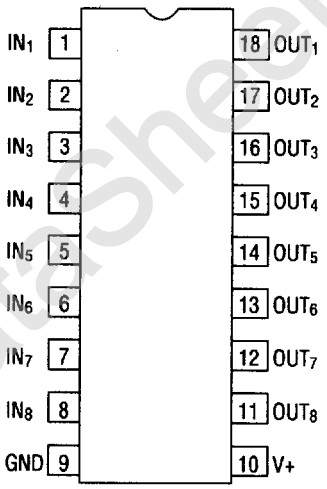
The MSL918 is a high voltage vacuum fluorescent display tube driver, which uses positive voltage and contains eight circuits. Each output does not contain a pull-down resistor, hence it should be connected to an external resistor (about 150kΩ)

Input may be driven directly by the TTL or CMOS. The vacuum fluorescent display tube driver may also be used as a high voltage and current driver.

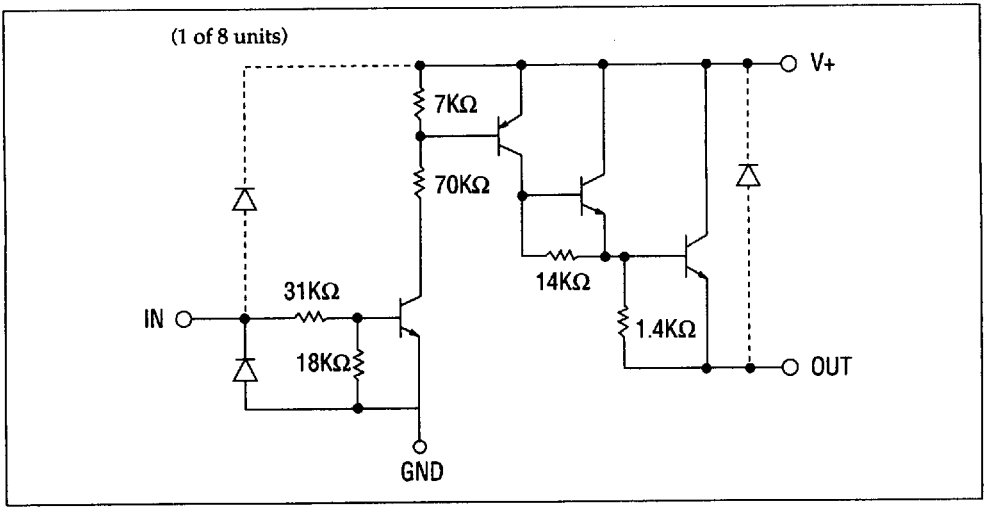
- 18-pin Plastic DIP (DIP 18-P-300)

PIN CONFIGURATION

(Top View) 18-pin Plastic DIP



CIRCUIT CONFIGURATION



ELECTRICAL CHARACTERISTICS

- Absolute Maximum Ratings

Parameter	Symbol	Condition	Limits	Unit
Supply voltage	V+	Ta=25°C	−0.3 ~ +35	V
Input voltage	VI	Ta=25°C	−0.5 ~ +10	V
Output voltage	Vo	Ta=25°C	−0.3 ~ V+	V
Output current	Io	Ta=25°C, only one circuit ON	−45	mA
Storage temperature	Tstg	–	−55 ~ +150	°C

- Recommended Operating Conditions

Parameter	Symbol	Condition	Limits	Unit
Supply voltage	V+	–	+15 ~ +30	V
Input voltage	VI	–	0 ~ +7	V
Output current	Io	Only one circuit ON*	0 ~ −40	mA
		Per circuit when all circuits are ON*	0 ~ −11	mA
		Total output current*	0 ~ −90	mA
Operating temperature	Top	–	−30 ~ +75	°C

* Duty: 50% max.

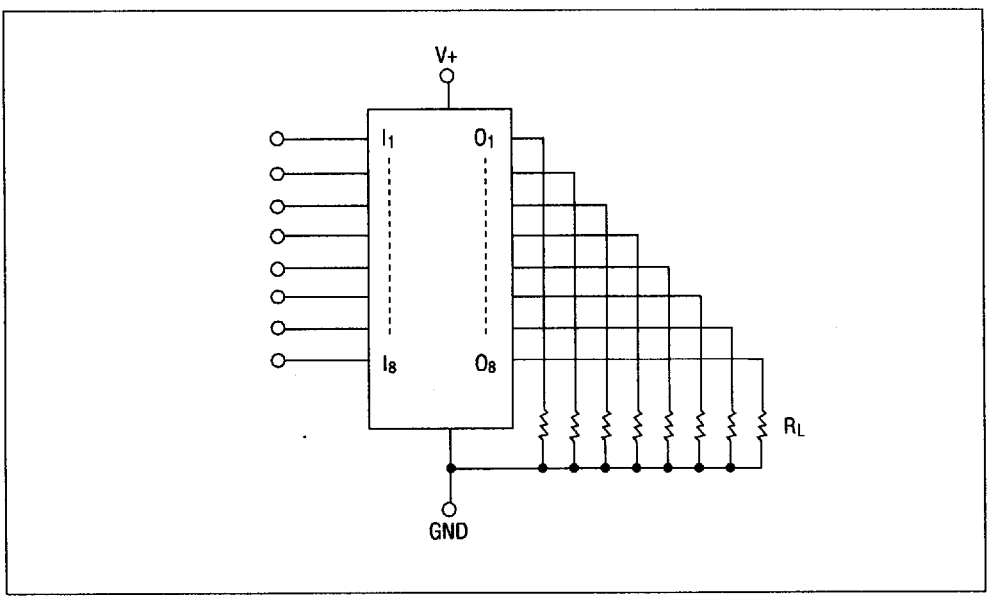
- DC Characteristics

(Ta= –30 ~ +75°C, TYP: Ta=25°C)

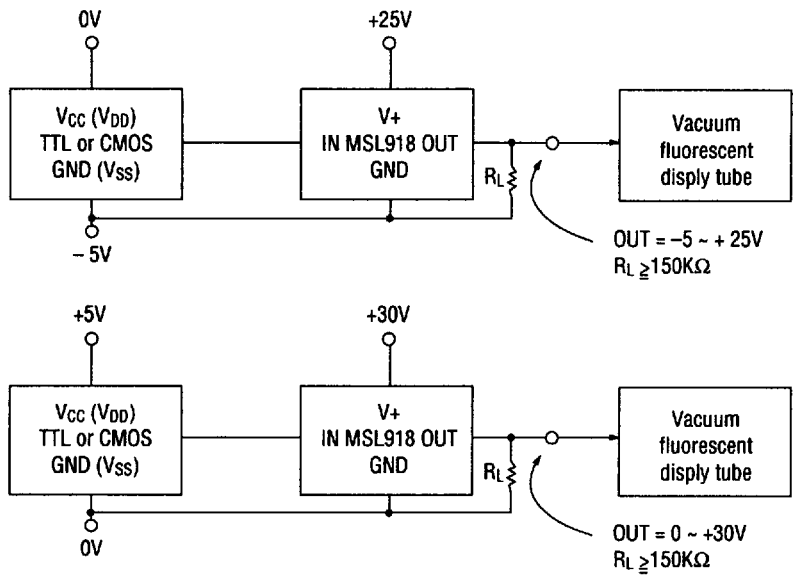
Parameter	Symbol	Condition				Specification			Unit
		V+ (V)	VI (V)	Io (mA)	RL (Ω)	MIN	TYP	MAX	
High input voltage	VIH	+30	–	–	–	2.5	–	–	V
Low input voltage	VIL	+30	–	–	–	–	–	1.0	V
Low input current	IIL	+30	1.0	–	–	–	–20	–80	μA
High input current	IIH1	+30	2.5	–	–	–	–	0.15	mA
	IIH2	+30	7	–	–	–	–	0.5	mA
High output voltage	VOH	+30	2.5	–40	–	27	–	–	V
Low output voltage	VOL	+30	1.0	0	*1 150K	–	–	3.0	V
Supply current	ICC OFF	+30	ALL INPUTS 1.0	–	*1 150K	–	–	0.4	mA
	ICC ON	+30	ALL INPUTS 2.5	–	*1 150K	–	9.5	14	mA

*1 RL connection method

RL CONNECTION METHOD



APPLICATION NOTE



(Note) When noise level on input or output signal is high, use a clamping diode.