

**HIGH-VOLTAGE FLUORESCENT INDICATOR PANEL DRIVER  
SILICON EPITAXIAL TRANSISTOR ARRAY**
**DESCRIPTION**

The  $\mu$ PA6118C is a monolithic array of eight independent NPN darlington output stages with a common bias supply.

This device is especially suited for driving FIP (Fluorescent Indicator Panel).

The output load is activated when the input is pulled high, so that it is easy to design logic circuits of a microcomputer, etc.

**FEATURES**

- High Voltage rating,  $V_{CC}$ : 85 V
- Output pull down resistors incorporated.
- Base current limiting resistors incorporated.
- Non-inverting type (Input: High → Output: High).
- Package is 18 pin plastic DIP (Dual In-Line Package).

**ABSOLUTE MAXIMUM RATINGS**Maximum Voltages and Current ( $T_a = 25^\circ\text{C}$ )

Supply Voltage	$V_{CC}$	85	V
Output Voltage	$V_O$	85	V
Input Voltage	$V_I$	20	V
Output Current	$I_O$	40	mA/unit

## Maximum Power Dissipation

Package Dissipation	$P_T$	1.4	W
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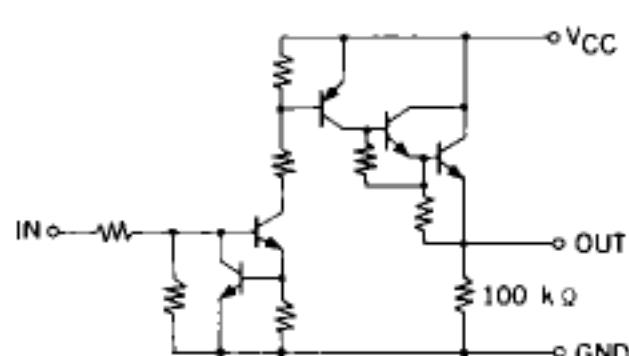
## Maximum Temperature

Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	$T_{j(opt)}$	+150	$^\circ\text{C}$

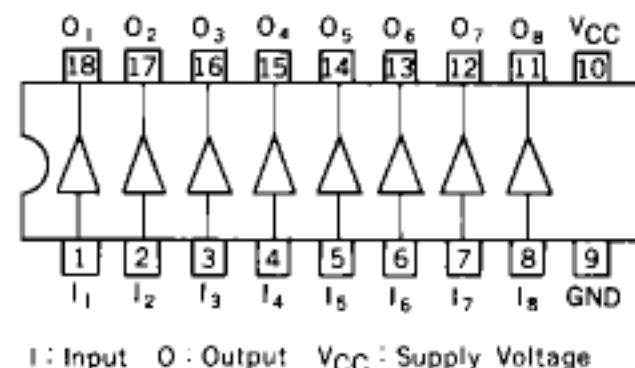
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Leakage Current	$I_L$			15	$\mu\text{A}$	$V_{CC} = 80 \text{ V}, V_I = 0.4 \text{ V}$
Output OFF Voltage	$V_{OFF}$			1.0	V	$V_{CC} = 80 \text{ V}, V_I = 0.4 \text{ V}$
Output Pull Down Current	$I_p$	-560		-1370	$\mu\text{A}$	$V_{CC} = V_O = 80 \text{ V}$ , Input Open
Output ON Voltage	$V_{ON}$	77			V	$V_{CC} = 80 \text{ V}, V_I = 2.4 \text{ V}, I_O = 25 \text{ mA}$
Input ON Current	$I_I$			225	$\mu\text{A}$	$V_{CC} = 80 \text{ V}, V_I = 2.4 \text{ V}$
				650	$\mu\text{A}$	$V_{CC} = 80 \text{ V}, V_I = 5.0 \text{ V}$
Supply Current	$I_{CC}$			100	$\mu\text{A}$	$V_{CC} = 80 \text{ V}$ , All Inputs Open
				11	mA	$V_{CC} = 80 \text{ V}$ , All Inputs = 2.4 V

EQUIVALENT CIRCUIT (1 Unit)

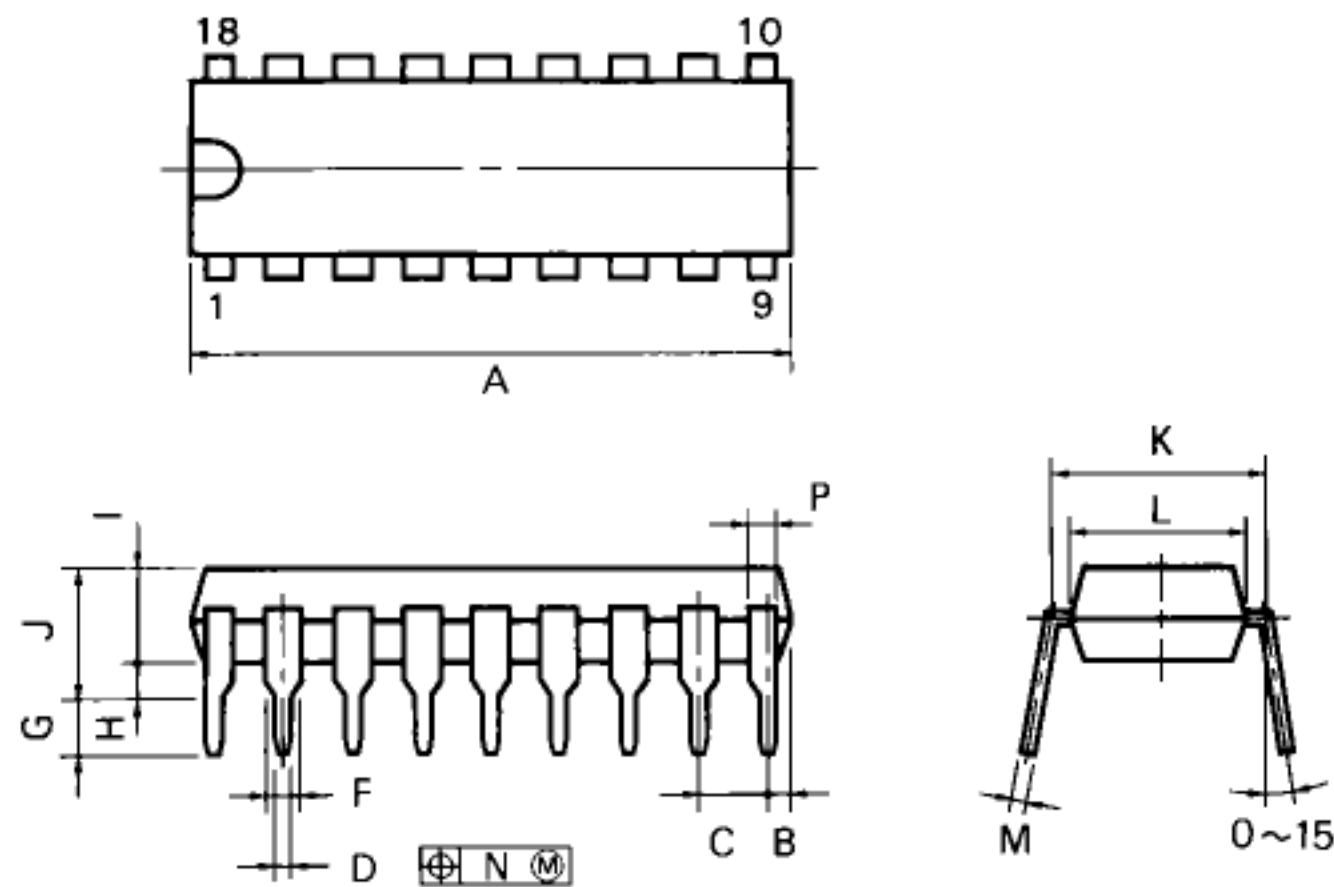


CONNECTION DIAGRAM (Top View)



I : Input   O : Output   V<sub>CC</sub> : Supply Voltage

## 18PIN PLASTIC DIP (300 mil)



## NOTES

- 1) Each lead centerline is located within 0.25 mm (0.01 inch) of its true position (T.P.) at maximum material condition.
- 2) Item "K" to center of leads when formed parallel.

ITEM	MILLIMETERS	INCHES
A	22.86 MAX.	0.900 MAX.
B	1.27 MAX.	0.050 MAX.
C	2.54 (T.P.)	0.100 (T.P.)
D	0.50 <sup>+0.004</sup> <sub>-0.010</sub>	0.020 <sup>+0.004</sup> <sub>-0.005</sub>
F	1.2 MIN.	0.047 MIN.
G	3.2 <sup>+0.3</sup> <sub>-0.2</sub>	0.126 <sup>+0.012</sup> <sub>-0.008</sub>
H	0.51 MIN.	0.020 MIN.
I	4.31 MAX.	0.170 MAX.
J	5.08 MAX.	0.200 MAX.
K	7.62 (T.P.)	0.300 (T.P.)
L	6.4	0.252
M	0.25 <sup>+0.006</sup> <sub>-0.008</sub>	0.010 <sup>+0.004</sup> <sub>-0.003</sub>
N	0.25	0.01
P	1.0 MIN.	0.039 MIN.