

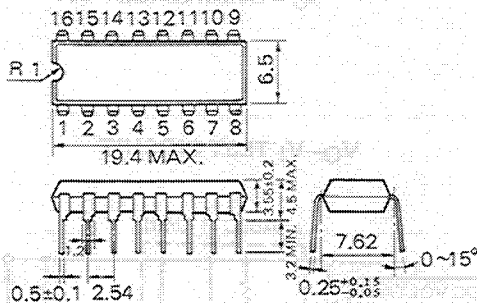
**FLUORESCENT INDICATOR PANEL DRIVER**  
**PNP-NPN SILICON EPITAXIAL TRANSISTOR ARRAY**

**DESCRIPTION**

The μPA80C is a monolithic array of seven PNP-NPN structured transistors. This device is especially suited for driving FIP (Fluorescent Indicator Panel).

**PACKAGE DIMENSIONS**

in millimeters



**FEATURES**

- High voltage rating  $V_{SS}$ : -60 V
- Pull down resistors incorporated
- Base current limiting resistors incorporated
- Package is 16 pin plastic DIP (Dual In-Line Package).

**ABSOLUTE MAXIMUM RATINGS**

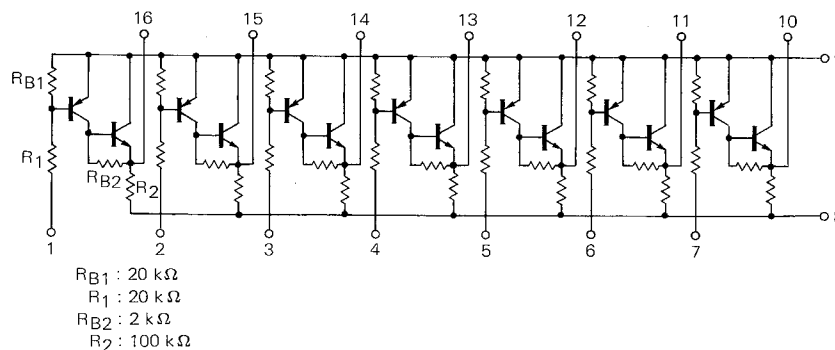
Maximum Voltages and Currents ( $T_a=25^\circ\text{C}$ )

Supply Voltage	$V_{SS}$	-60	V
Input Voltage	$V_I$	-20	V
Output Current	$I_o$	50	mA/unit
Maximum Power Dissipation			
Total Power Dissipation	$P_d$	550	mW
Maximum Temperature			
Storage Temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$
Operating Temperature	$T_{opt}$	-25 to +75	$^\circ\text{C}$

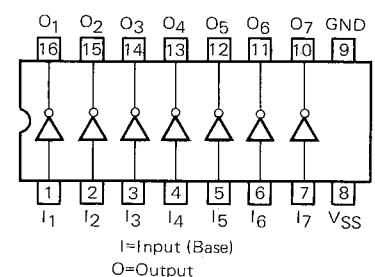
**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )**

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Output Leakage Current	$I_L$			1.0	$\mu\text{A}$	$V_{CE}=50\text{ V}$
DC Current Gain	$h_{FE1}$	100	280			$V_{CE}=2.0\text{ V}, I_O=20\text{ mA}$
	$h_{FE2}$	250	450			$V_{CE}=2.0\text{ V}, I_O=40\text{ mA}$
Collector Saturation Voltage	$V_{CE(sat)}$		0.95	1.5	V	$I_O=20\text{ mA}, I_I=0.3\text{ mA}$
Input Current	$I_I$			1.0	mA	$V_I=-5.0\text{ V}$

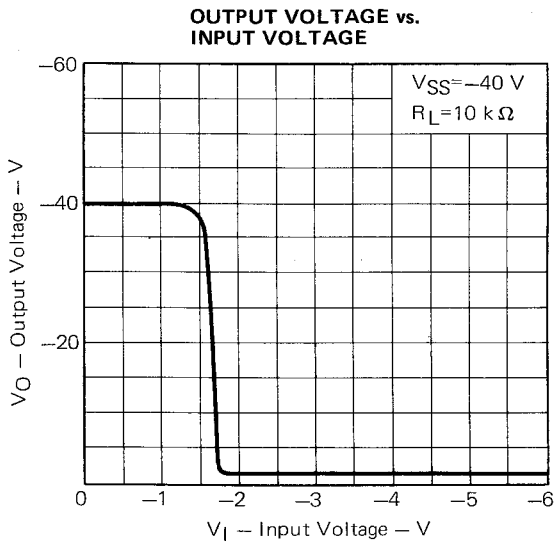
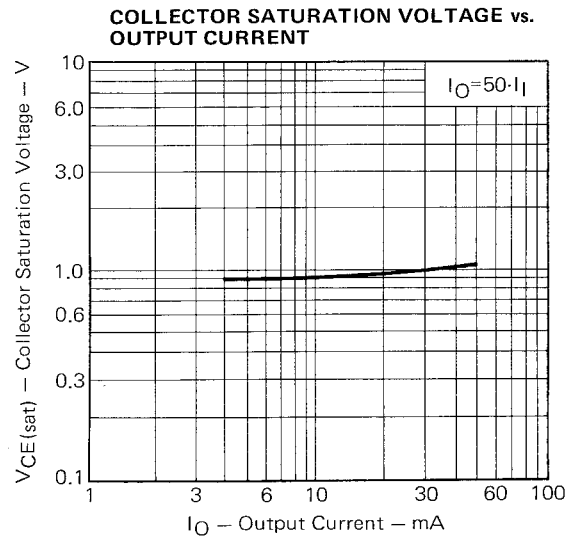
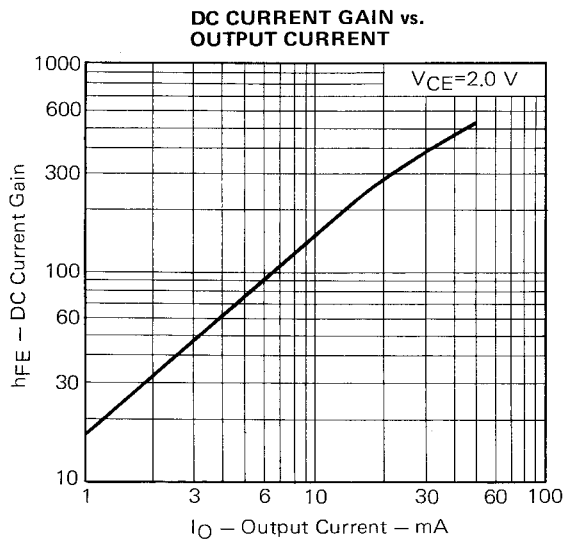
**EQUIVALENT CIRCUIT**



**CONNECTION DIAGRAM (Top View)**



**TYPICAL CHARACTERISTICS (Ta=25 °C)**



**VO-VI TEST CIRCUIT**

