

TRANSISTOR ARRAY

μ PA53C

LED, LAMP DRIVER

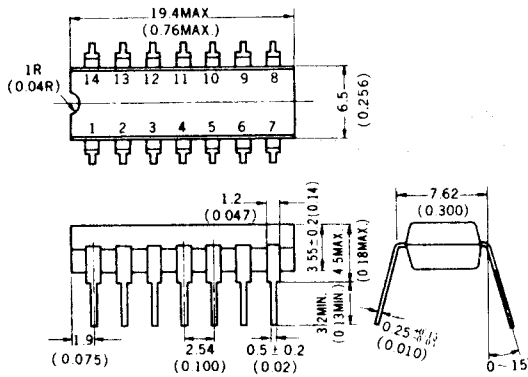
NPN SILICON EPITAXIAL DARLINGTON TRANSISTOR ARRAY

DESCRIPTION

The μ PA53C is a monolithic array of five darlington transistors.
Applications are printer hummer driver and LED display driver with MOS output signal.

PACKAGE DIMENSIONS

in millimeters (inches)



FEATURES

- High DC Current Gain
- High Output Drive Current
- Package is 14 pin PLASTIC DIP.

ABSOLUTE MAXIMUM RATINGS

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

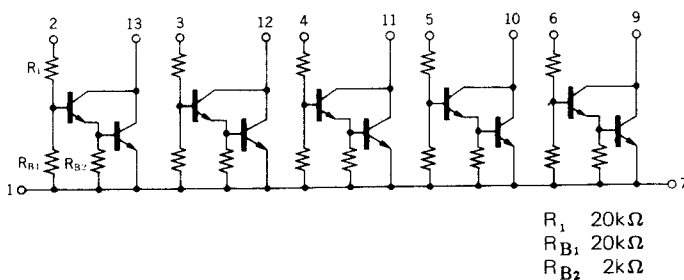
Collector to Base Voltage ($R_{BE}=\infty$)	VCBO	30	V
Collector to Emitter Voltage (Open Base)	VCEO	30	V
Input Voltage	VIN	30	V
Continuous Collector Current	IC(DC)	0.4	A/unit
Peak Collector Current	IC*	2.0	A/package
Maximum Power Dissipation			
Total Power Dissipation	PT*	1.2	W/package
Maximum Temperature			
Storage Temperature	Tstg	-40 to +125	$^\circ\text{C}$
Operating Temperature	Topt	-25 to +75	$^\circ\text{C}$

*PW = 10ms, duty cycle \leq 10%

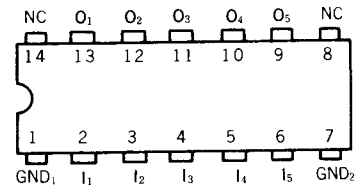
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Circuit Current	I_L		0.5	100	μA	$V_{CE}=20\text{V}$, $V_{IN}=0$
DC Current Gain	h_{FE}	2000	3200			$V_{CE}=5.0\text{V}$, $I_C=200\text{mA}$
Collector Saturation Voltage	$V_{CE(sat)1}$		0.9	1.3	V	$I_C=100\text{mA}$, $V_{IN}=5.0\text{V}$
Collector Saturation Voltage	$V_{CE(sat)2}$		1.3	2.2	V	$I_C=400\text{mA}$, $V_{IN}=20\text{V}$

EQUIVALENT CIRCUIT



CONNECTION DIAGRAM (Top View)



I : Input(Base)
O : Output(Collector)
GND(Common Emitter)