

Phase-out/Discontinued

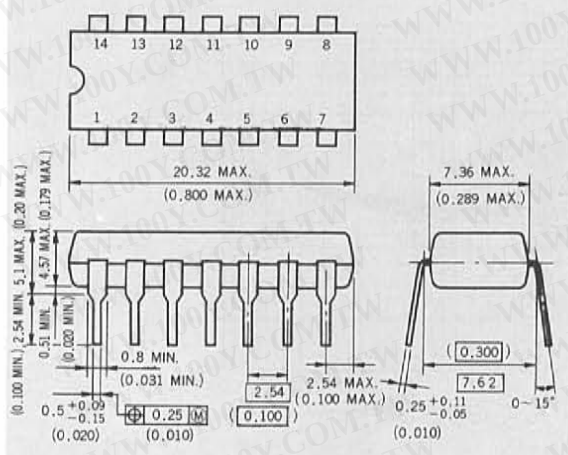
LED, LAMP DRIVER

NPN SILICON EPITAXIAL DARLINGTON TRANSISTOR ARRAY

DESCRIPTION

The μ PA53C is a monolithic array of five darlington transistors. This device is especially suited for driving LED, lamps and printer hummers with MOS output signal.

PACKAGE DIMENSIONS
in millimeters (inches)



FEATURES

- High DC current gain.
- High output drive current.
- Package is 14 pin plastic DIP (Dual In-Line Package).

ABSOLUTE MAXIMUM RATINGS

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

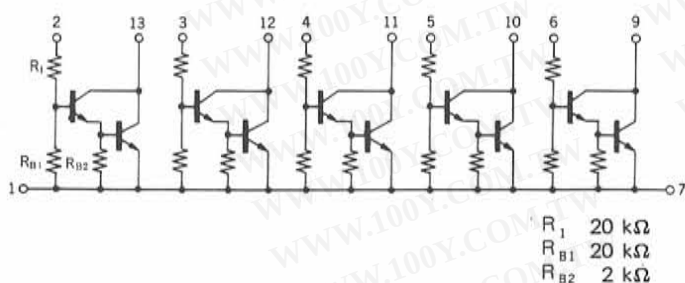
Collector to Base Voltage ($R_{BE}=\infty$)	VCBO	30	V
Collector to Emitter Voltage (Open Base)	VCEO	30	V
Input Voltage	VIN	30	V
Continuous Collector Current	IC(DC)	0.4	A/unit
Peak Collector Current	IC*	2.0	A/package
Maximum Power Dissipation			
Total Power Dissipation	PT*	1.2	W/package
Maximum Temperature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

*PW = 10 ms, Duty Cycle $\leq 10\%$

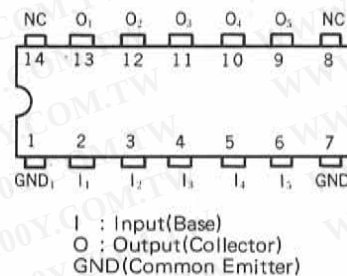
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

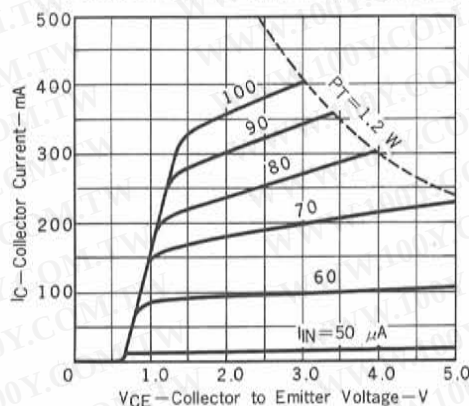
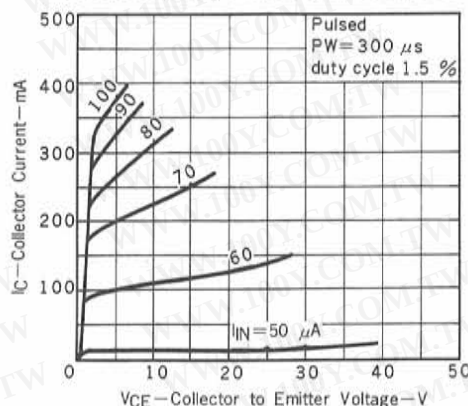
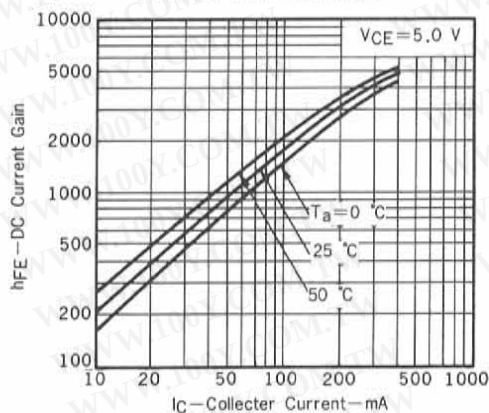
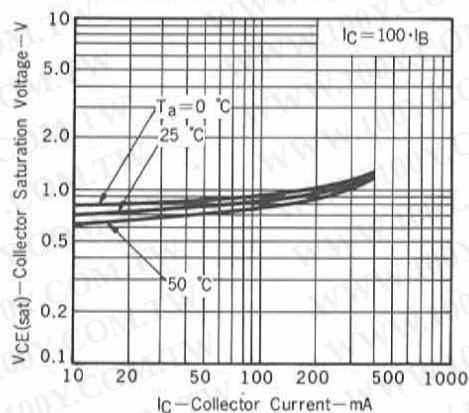
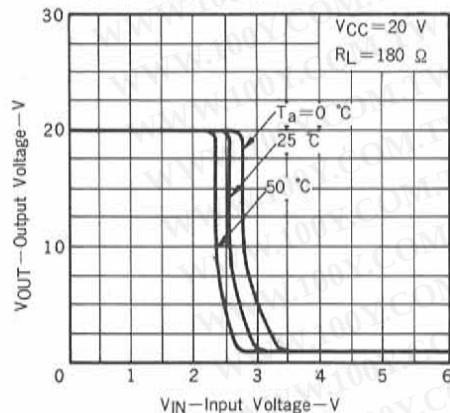
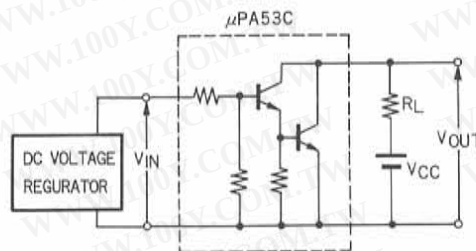
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Circuit Current	I_L		0.5	100	μA	$V_{CE} = 20\text{ V}, V_{IN} = 0$
DC Current Gain	h_{FE}	2000	3200			$V_{CE} = 5.0\text{ V}, I_C = 200\text{ mA}$
Collector Saturation Voltage	$V_{CE(sat)1}$		0.9	1.3	V	$I_C = 100\text{ mA}, V_{IN} = 5.0\text{ V}$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



Phase-out/DiscontinuedTYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)COLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGECOLLECTOR CURRENT vs.
COLLECTOR TO EMITTER VOLTAGEDC CURRENT GAIN vs.
COLLECTOR CURRENTCOLLECTOR SATURATION VOLTAGE
vs. COLLECTOR CURRENTOUTPUT VOLTAGE vs.
INPUT VOLTAGE V_{OUT} - V_{IN} TEST CIRCUIT

NEC Corporation

INTERNATIONAL ELECTRON DEVICES DIV.
NEC Building, 33-1, Shiba Gocho
Minato-ku, Tokyo 108, Japan
Tel: Tokyo 454-1111
Telex Address: NECTOK J22686
Cable Address: MICROPHONE TOKYO

勝特力材料 886-3-5753170
胜特力电子(上海) 86-21-54151736
胜特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)