

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# Phase-out/Discontinued $\mu$ PA79C

## MINI PRINTER DRIVER

## NPN SILICON EPITAXIAL TRANSISTOR ARRAY

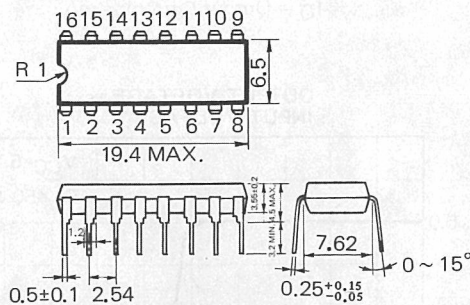
### DESCRIPTION

The  $\mu$ PA79C is a monolithic array of seven transistors.

This device is especially suited for driving low supply voltage printer with up to 0.1 A output current per unit.

### PACKAGE DIMENSIONS

in millimeters



### FEATURES

- Low Saturation Voltage  $\rightarrow V_{CE(sat)} \leq 0.6$  V
- High DC Current Gain  $\rightarrow h_{FE} \geq 1000$
- Reverse Bias Protected Inputs
- Transient Protected Outputs
- Package is 16 pin PLASTIC DIP

### ABSOLUTE MAXIMUM RATINGS

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

Supply Voltage	$V_{CC}$	20	V
Input Voltage	$V_I$	-40 to +30	V
Output Voltage	$V_O$	20	V
Continuous Output Current	$I_{C(DC)**}$	200	mA/unit
Peak Output Current	$I_C^*$	150	mA/unit
Maximum Power Dissipation			
Total Power Dissipation	$P_d$	550	mW/package
Maximum Temperature			
Operating Temperature	$T_{opt}$	-25 to +75	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

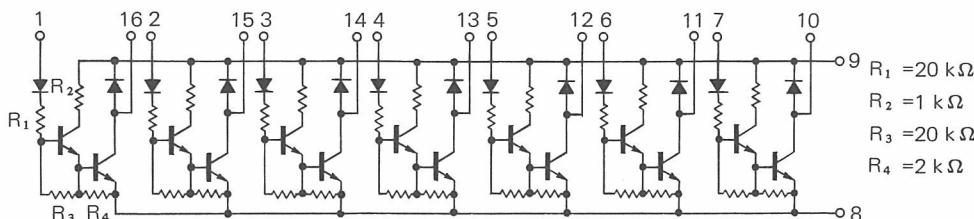
\*\*DC (1 unit)

\*  $PW \leq 30$  ms, duty cycle  $\leq 10$  % (The same current for all units)

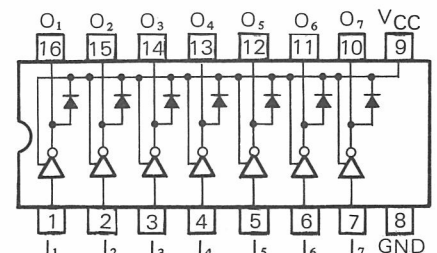
### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Output Leakage Current	$I_{L1}$			10	$\mu\text{A}$	$V_{CC}=20$ V, $V_I=0$
DC Current Gain	$h_{FE}$	1000	2500			$V_{CC}=5$ V, $V_{CE}=1$ V, $I_O=120$ mA
Collector Saturation Voltage	$V_{CE(sat)}$			0.6	V	$V_{CC}=5$ V, $I_O=120$ mA, $I_I=0.2$ mA
Output Leakage Current	$I_{L2}$			10	$\mu\text{A}$	$V_{CC}=V_{CE}=5$ V, $V_I=1.5$ V
Input Voltage	$V_I$			4.0	V	$V_{CC}=5$ V, $V_{CE}=1$ V, $I_O=120$ mA
Forward Voltage (Clamp Diode)	$V_F$			2.0	V	$I_F=120$ mA

### EQUIVALENT CIRCUIT

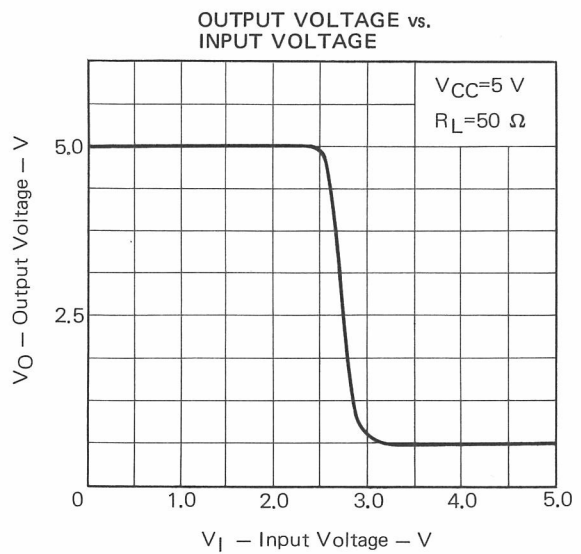
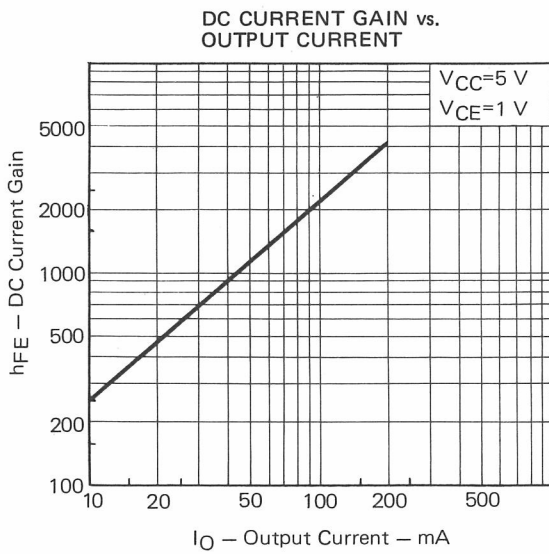
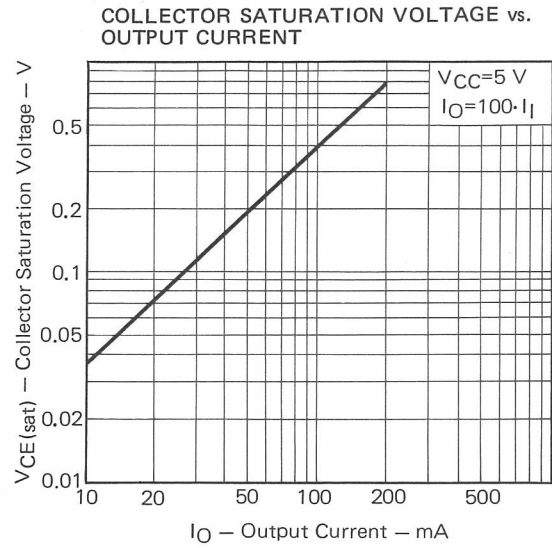
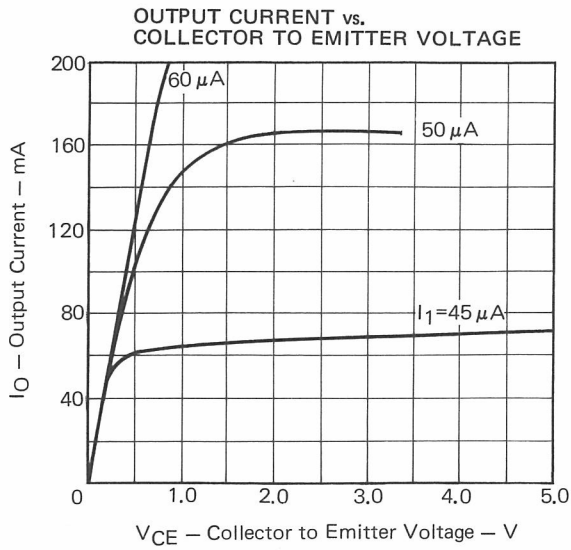


### CONNECTION DIAGRAM (Top View)

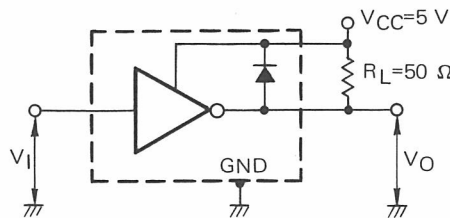


**Phase-out/Discontinued**

TYPICAL CHARACTERISTICS (Ta = 25 °C)



VO-VI TEST CIRCUIT



Please note our new name, NEC Corporation, starting April 1, 1983.

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