To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

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

April 1st, 2010
Renesas Electronics Corporation

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

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RENESAS

TRANSISTOR ARRAY

Phase-out/Discontinued

μPA67C

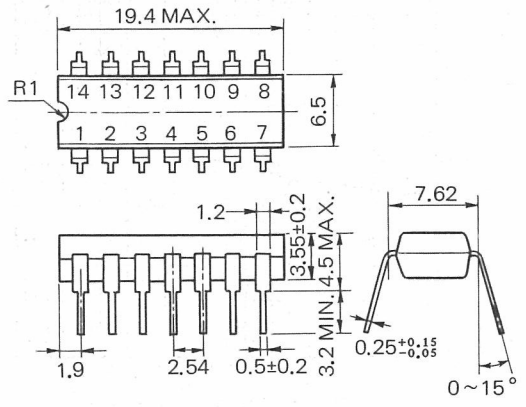
NPN SILICON EPITAXIAL DARLINGTON TRANSISTOR ARRAY

DESCRIPTION

The μPA67C is a monolithic array of six darlington transistors.
This device is especially suited for driving miniprinter hummer with up to 0.1 A output current per unit.

PACKAGE DIMENSIONS

in millimeters



FEATURES

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

ABSOLUTE MAXIMUM RATINGS

Maximum Voltages and Currents (Ta = 25 °C)

Output Voltage	V_O	30	V
Input Voltage	V_I	−40 to + 30	V
Peak Output Current	I_O**	150	mA/unit
Continuous Collector Current	I_O*	70	mA/unit
Maximum Power Dissipation			
Total Power Dissipation	Pd	550	mW/package
Maximum Temperature			
Operating Temperature	T_{opt}	−25 to + 75	°C
Storage Temperature	T_{stg}	−40 to +125	°C

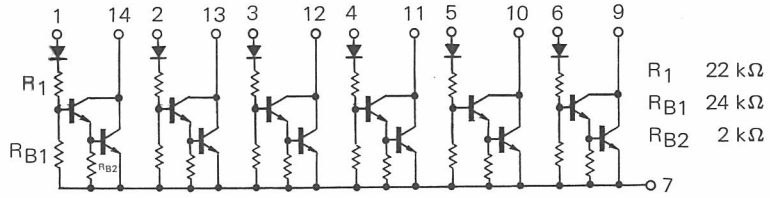
** PW=20 ms, duty cycle≦10 % (All units turned on)

* DC (All units turned on)

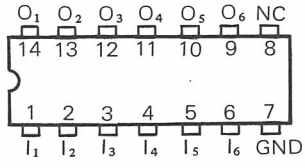
ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Output Leakage Current	I_L			10	μA	V_{CE}=20 V, V_I=0
Output On Current	I_{ON}	100			mA	V_{IH}≧5.0 V, V_{CE}=2.0 V
Output Off Current	I_{OFF}			10	μA	V_{IL}≦1.0 V, V_{CE}=2.0 V
Input Current	I_I			1.3	mA	V_I=20 V, V_{CE}=0
Input Reverse Current	$I_{I(R)}$			−10	μA	V_I=−30 V, V_{CE}=0
Low Level Output Voltage	V_{OL}			1.3	V	V_I=13 V, I_O=100 mA

EQUIVALENT CIRCUIT



CONNECTION DIAGRAM (Top View)

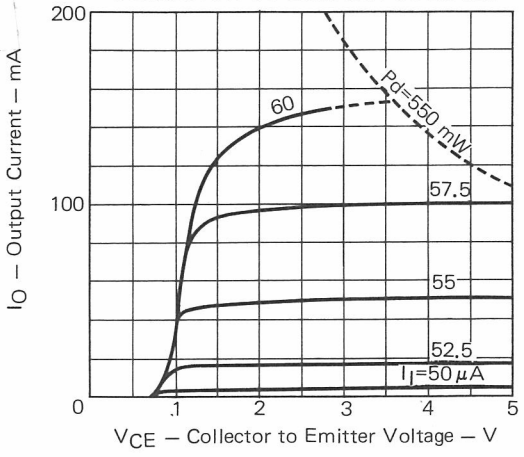


I : Input (Base)
O : Output (Collector)
GND : (Common Emitter)

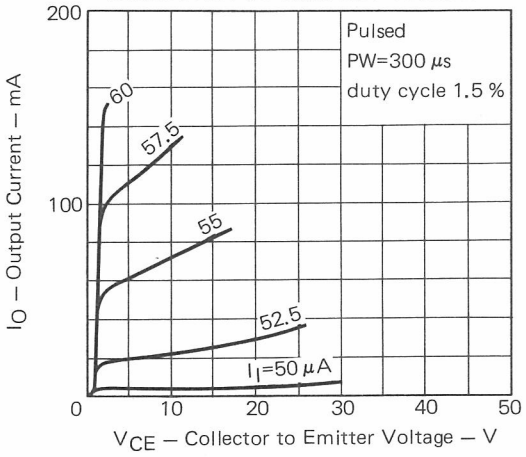
Phase-out/Discontinued

TYPICAL CHARACTERISTICS (Ta = 25 °C)

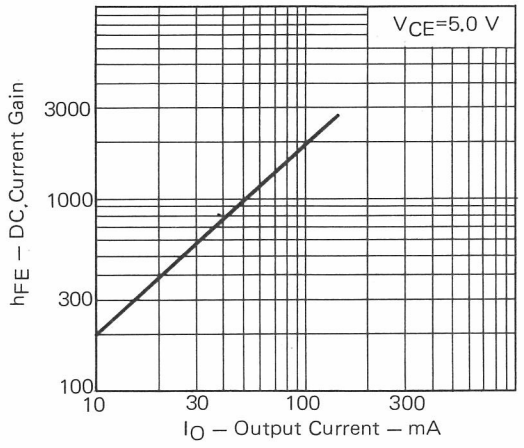
OUTPUT CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



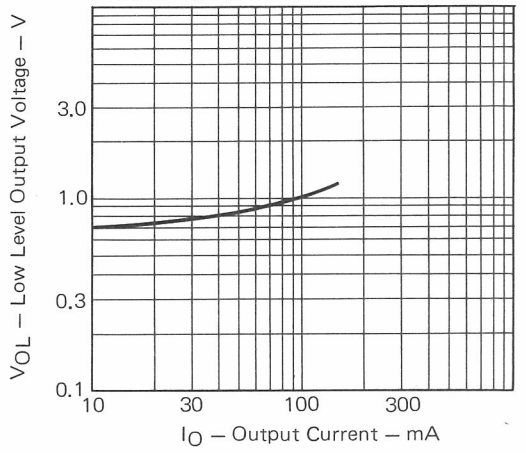
OUTPUT CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



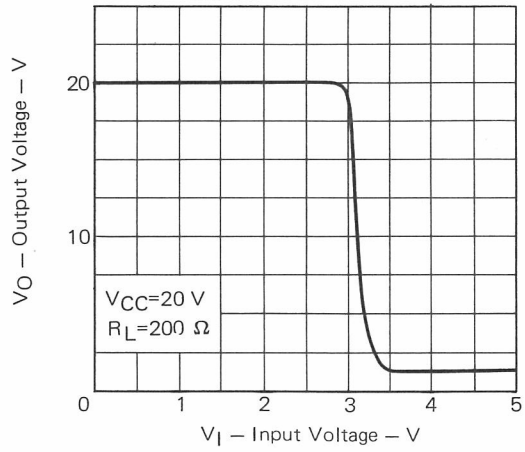
DC CURRENT GAIN vs. OUTPUT CURRENT



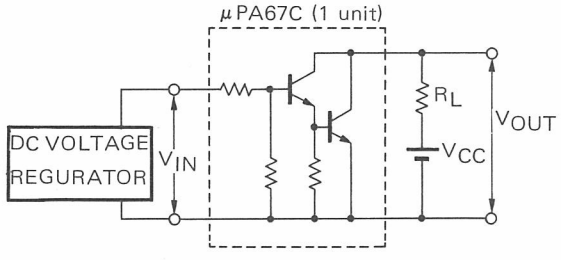
LOW LEVEL OUTPUT VOLTAGE vs. OUTPUT CURRENT



OUTPUT VOLTAGE vs. INPUT VOLTAGE



V_O–V_I TEST CIRCUIT



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