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April 1st, 20<mark>10</mark> Renesas Electronics Corporation

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SILICON TRANSISTOR 2SB624A

AUDIO FREQUENCY POWER AMPLIFIER PNP SILICON EPITAXIAL TRANSISTOR MINI MOLD

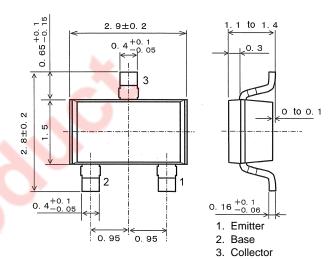
FEATURES

- Complementary to NEC 2SD596A NPN Transistor.
- High DC Current Gain: $h_{FE} = 200 \text{ TYP}$. ($V_{CE} = -1.0 \text{ V}$, $I_{C} = -100 \text{ mA}$)

ABSOLUTE MAXIMUM RATINGS (TA = 25°C)

Collector to Base Voltage	Vсво	-30	V
Collector to Emitter Voltage	Vceo	-25	V
Emitter to Base Voltage	Vево	-5.0	V
Collector Current (DC)	lc	-700	mΑ
Total Power Dissipation	Рт	200	mW
Junction Temperature	T_{j}	150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

PACKAGE DRAWING (Unit: mm)



ELECTRICAL CHARACTERISTICS (TA = 25°C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cut-off Current	Ісво			-100	nA	$V_{CB} = -30 \text{ V}, I_E = 0 \text{ A}$
Emitter Cut-off Current	ІЕВО			-100	nA	V _{EB} = -5.0 V, I _C = 0 A
DC Current Gain	hFE1	110	200	400		$V_{CE} = -1.0 \text{ V, Ic} = -100 \text{ mA}^{Note}$
	hFE2	50				$V_{CE} = -1.0 \text{ V, Ic} = -700 \text{ mA}^{Note}$
Collector Saturation Voltage	VCE(sat)		-0.25	-0.6	٧	$I_{C} = -700 \text{ mA}, I_{B} = -70 \text{ mA}^{Note}$
Base to Emitter Voltage	VBE	-600	-640	-700	mV	$V_{CE} = -6.0 \text{ V, Ic} = -10 \text{ mA}^{Note}$
Gain Bandwidth Product	f⊤		160		MHz	VcE = −6.0 V, IE = 10 mA
Output Capacitance	Cob		17		pF	$V_{CB} = -6.0 \text{ V}, I_E = 0 \text{ A}, f = 1.0 \text{ MHz}$

Note Pulsed: PW \leq 350 μ s, Duty Cycle \leq 2%

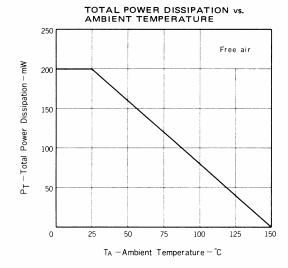
hfe1 CLASSIFICATION

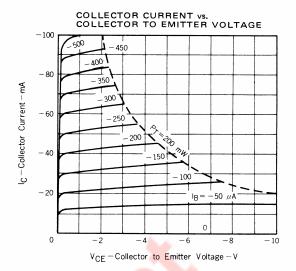
Marking	BV1	BV2	BV3	BV4	BV5
h _{FE1}	110 to 180	135 to 220	170 to 270	200 to 320	250 to 400

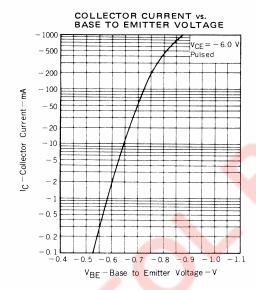
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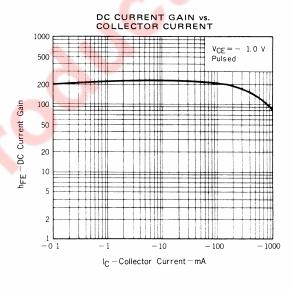


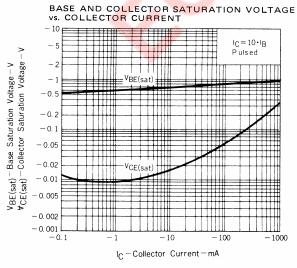
TYPICAL CHARACTERISTICS (TA = 25°C)

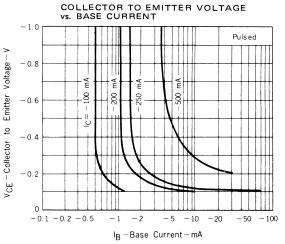


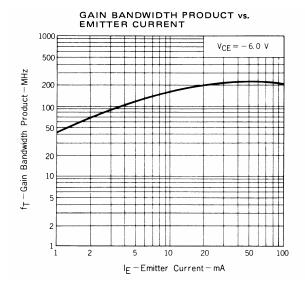


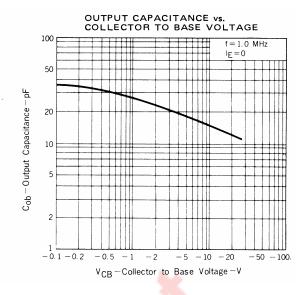












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