

SILICON TRANSISTOR 2SD596A

AUDIO FREQUENCY POWER AMPLIFIER NPN SILICON EPITAXIAL TRANSISTOR MINI MOLD

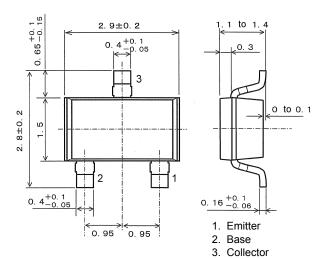
FEATURES

- Complementary to NEC 2SB624 PNP Transistor.
- High DC Current Gain: hFE = 200 TYP. (VcE = 1.0 V, Ic = 100 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	V_{EBO}	5.0	V
Collector Current (DC)	lc	700	mΑ
Total Power Dissipation	Рт	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	-55 to +150	°C

PACKAGE DRAWING (Unit: mm)



ELECTRICAL CHARACTERISTICS (TA = 25°C)

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CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cut-off Current	Ісво			100	nA	V _{CB} = 30 V, I _E = 0 A
Emitter Cut-off Current	І ЕВО			100	nA	V _{EB} = 5.0 V, I _C = 0 A
DC Current Gain	h _{FE1}	110	200	400		V _{CE} = 1.0 V, I _C = 100 mA ^{Note}
	h _{FE2}	50				V _{CE} = 1.0 V, I _C = 700 mA ^{Note}
Collector Saturation Voltage	V _{CE(sat)}		0.22	0.6	V	Ic = 700 mA, I _B = 70 mA ^{Note}
Base to Emitter Voltage	VBE	600	640	700	mV	V _{CE} = 6.0 V, I _C = 10 mA ^{Note}
Gain Bandwidth Product	f⊤		170		MHz	V _{CE} = 6.0 V, I _E = -10 mA
Output Capacitance	Cob		12		pF	V _{CB} = 6.0 V, I _E = 0 A, f = 1.0 MHz

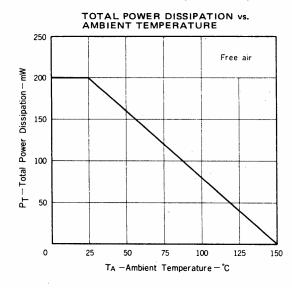
Note Pulsed: PW \leq 350 μ s, Duty Cycle \leq 2%

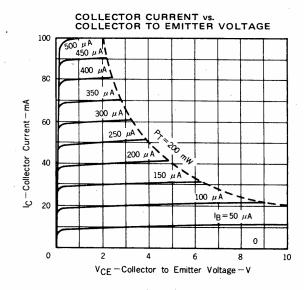
hfe1 CLASSIFICATION

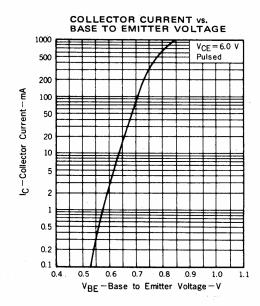
Marking	DV1	DV2	DV3	DV4	DV5
hfE	110 to 180	135 to 220	170 to 270	200 to 320	250 to 400

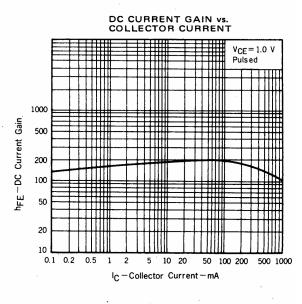
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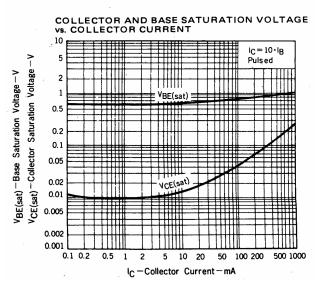
TYPICAL CHARACTERISTICS (TA = 25°C)

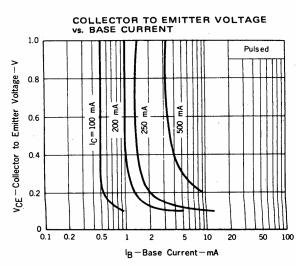


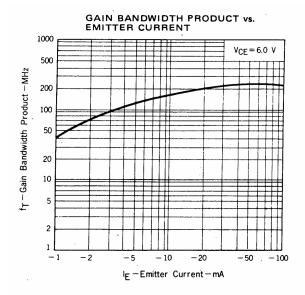


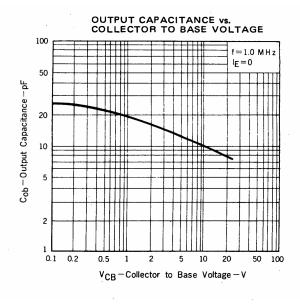












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