

**FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE**

DESCRIPTION

2SA1284 is a silicon PNP epitaxial type transistor designed for high voltage application.

Complementary with 2SC3244.

FEATURE

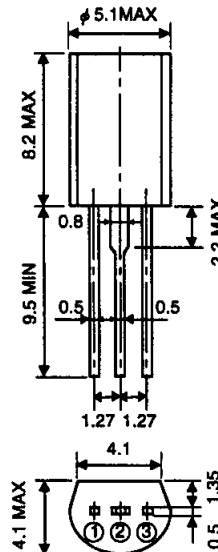
- High voltage $V_{CE0} = -100V$
- High peak collector current $I_{CM} = -800mA$
- High gain band width product $f_T = 130MHz$ (typ).
- High collector dissipation $P_C = 900mW$

APPLICATION

For 20 to 40W amp complimentary drive, relay drive, power supply application.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

- ① : EMITTER
 - ② : COLLECTOR
 - ③ : BASE
- EIAJ : —
JEDEC : —

Note) The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
Vcbo	Collector to Base voltage	-100	V
VEBO	Emitter to Base voltage	-5	V
VCEO	Collector to Emitter voltage	-100	V
ICM	Peak Collector current	-800	mA
Ic	Collector current	-500	mA
Pc	Collector dissipation (Ta=25°C)	900	mW
Tj	Junction temperature	+150	°C
Tstp	Storage temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

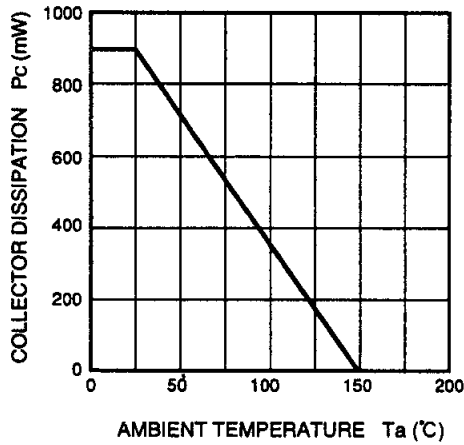
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CBO	C to B break down voltage	Ic = -10 μA, IE=0	-100			V
V(BR)EBO	E to B break down voltage	IE = -10 μA, Ic=0	-5			V
V(BR)CEO	C to E break down voltage	Ic = -1mA, RE=∞	-100			V
ICBO	Collector cut off current	VCE = -50 V, IE=0			-0.5	μA
IEBO	Emitter cut off current	VEB = -2V, Ic=0			-0.5	μA
hFE *	DC forward current gain	VCE = -10V, Ic=-10mA	55		300	—
VCE(sat)	C to E saturation voltage	Ic = -150mA, Ib= -15mA		-0.15	-0.5	V
fr	Gain band width product	VCE= -10V, IE= 10mA		130		MHz
Cob	Collector output capacitance	VCB= -10V, IE= 0, f=1MHz		11		pF

* : It shows hFE classification in right table.

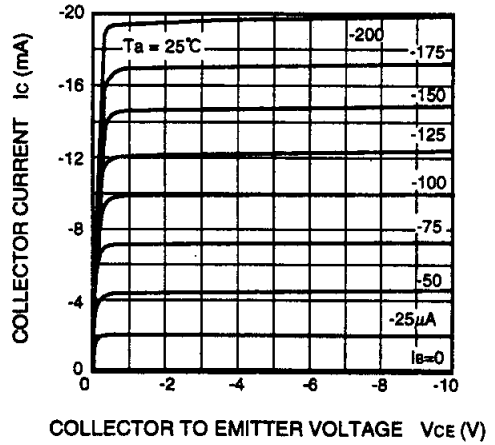
Item	C	D	E
hFE	55 to 110	90 to 180	150 to 300

TYPICAL CHARACTERISTICS

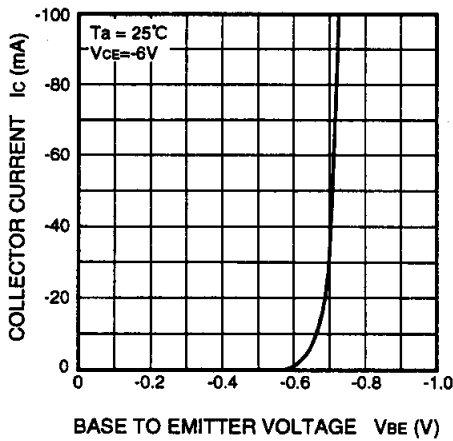
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



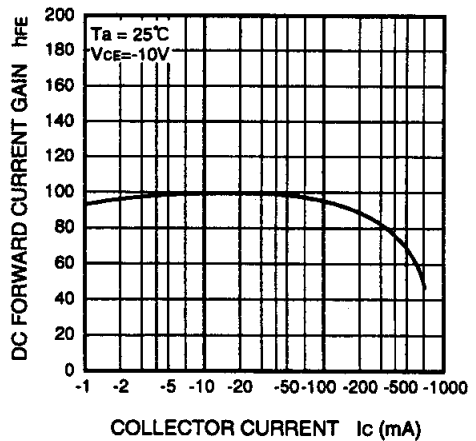
COMMON EMITTER OUTPUT



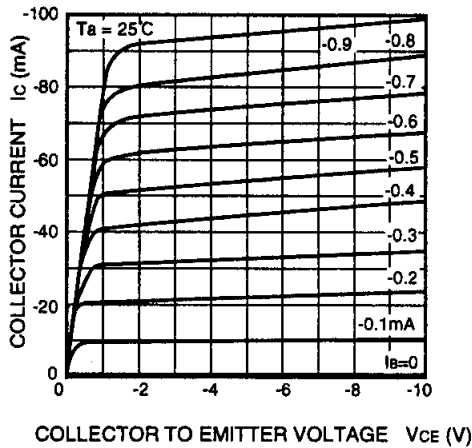
COMMON EMITTER TRANSFER



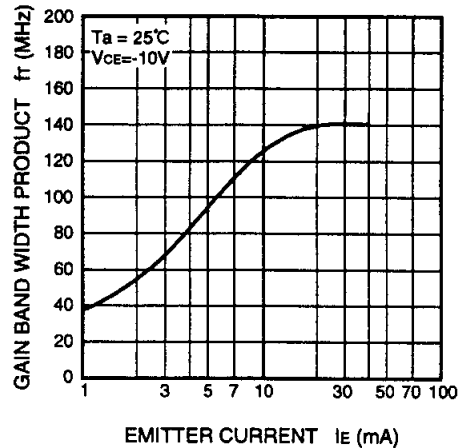
DC FORWARD CURRENT GAIN VS.
COLLECTOR CURRENT



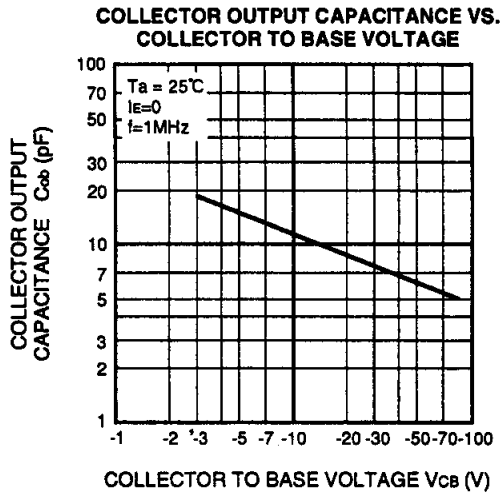
COMMON EMITTER OUTPUT



GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT



FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE



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