

〈SMALL-SIGNAL TRANSISTOR〉

2SC3244

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC3244 is a silicon NPN epitaxial type transistor designed with high collector dissipation, high voltage.
Complementary with 2SA1284.

FEATURE

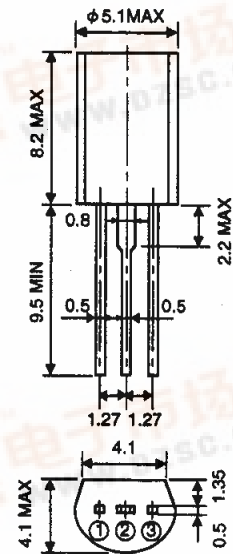
- High voltage $V_{CE0}=100V$
- High peak collector current $I_{CM}=800mA$
- High gain band width product. $f_T=130MHz$ (typ)
- High collector dissipation $P_C=900mW$

APPLICATION

Drive for 20 to 40W amplifier, relay drive, power supply application.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

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

Note) The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Rating	Unit
V _{CB0}	Collector to Base voltage	100	V
V _{EB0}	Emitter to Base voltage	5	V
V _{CE0}	Collector to Emitter voltage	100	V
I _{CM}	Peak collector current	800	mA
I _C	Collector current	500	mA
P _C	Collector dissipation (Ta=25°C)	900	mW
T _J	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CB0}	C to B break down voltage	I _C =10 μA, I _E =0	100			V
V _{(BR)EBO}	E to B break down voltage	I _E =10 μA, I _C =0	5			V
V _{(BR)CEO}	C to E break down voltage	I _C =1mA, R _{BE} =∞	100			V
I _{CB0}	Collector cut off current	V _{CB} =50V, I _E =0			0.5	μA
I _{EBO}	Emitter cut off current	V _{EB} =2V, I _C =0			0.5	μA
h _{FE} *	DC forward current gain	V _{CE} =10V, I _C =10mA	55		300	—
V _{CE(sat)}	C to E saturation voltage	I _C =150mA, I _B =15mA		0.15	0.5	V
f _T	Gain band width product	V _{CE} =10V, I _E =-10mA		130		MHz
C _{ob}	Collector output capacitance	V _{CB} =10V, I _E =0, f=1MHz		6.5		pF

* : It shows h_{FE} classification in right table.

item	C	D	E
h _{FE}	55 to 110	90 to 180	150 to 300

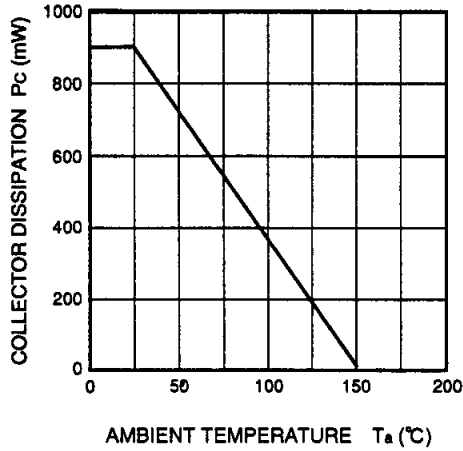


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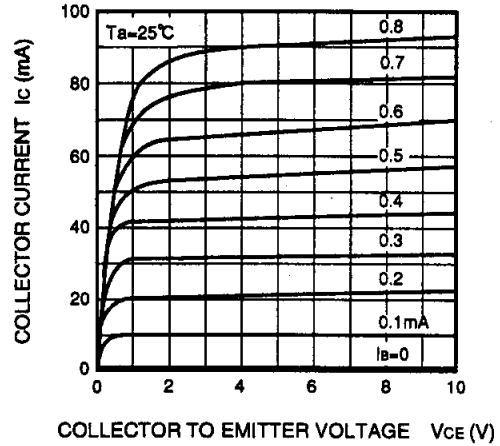
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TYPICAL CHARACTERISTICS

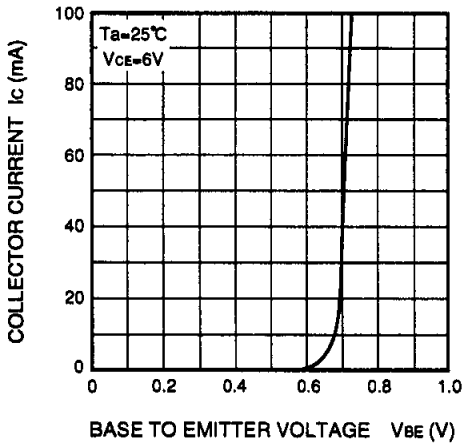
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



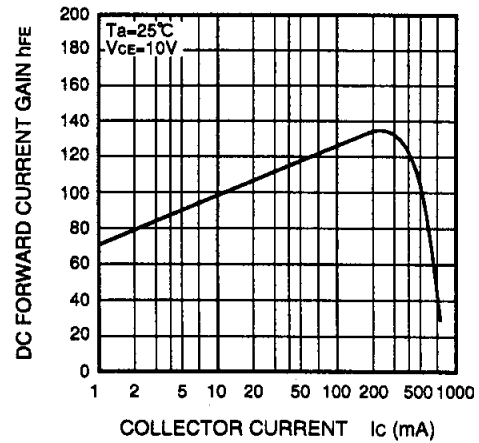
COMMON EMITTER OUTPUT



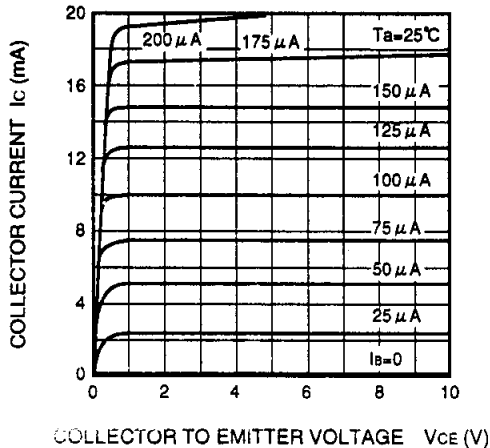
COMMON EMITTER TRANSFER



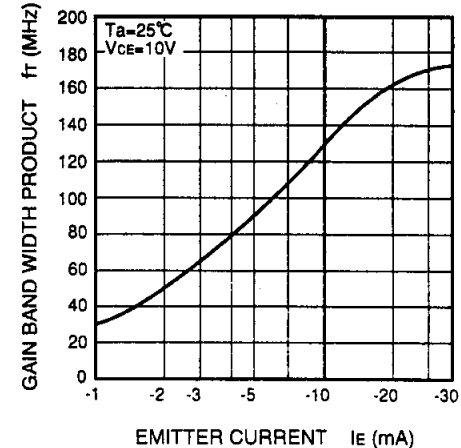
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COMMON EMITTER OUTPUT



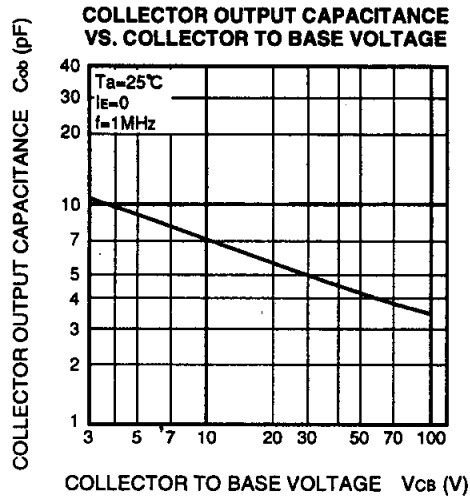
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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