

DESCRIPTION

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

Complementary with 2SA1284.

FEATURE

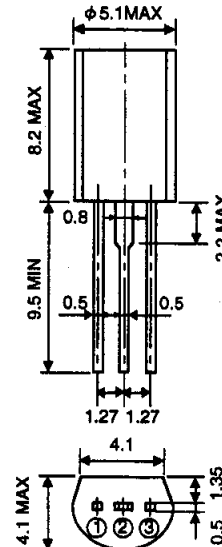
- High voltage $V_{CE0}=100V$
- High peak collector current $I_{CM}=800mA$
- High gain band width product. $f_T=130MHz$ (typ)
- High collector dissipation $P_C=900mW$

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

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

Note)

The dimension without tolerance represent central value.

MAXIMUM RATINGS ($T_a=25^{\circ}C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	100	V
V_{EBO}	Emitter to Base voltage	5	V
V_{CEO}	Collector to Emitter voltage	100	V
I_{CM}	Peak collector current	800	mA
I_C	Collector current	500	mA
P_C	Collector dissipation($T_a=25^{\circ}C$)	900	mW
T_j	Junction temperature	+150	$^{\circ}C$
T_{stg}	Storage temperature	-55 to +150	$^{\circ}C$

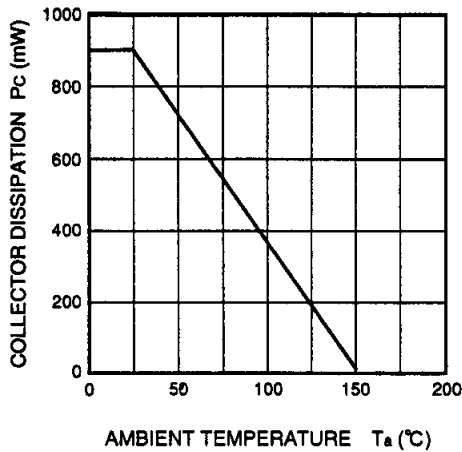
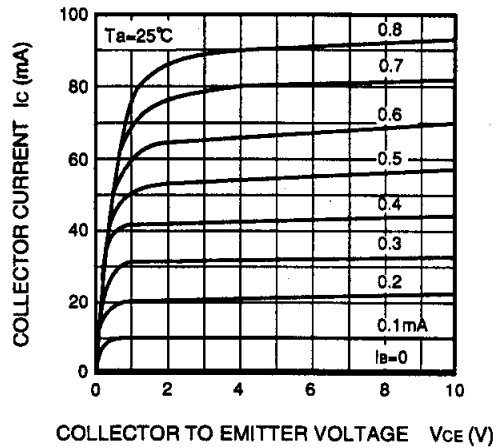
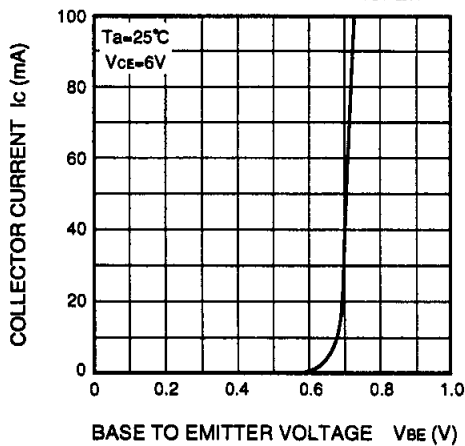
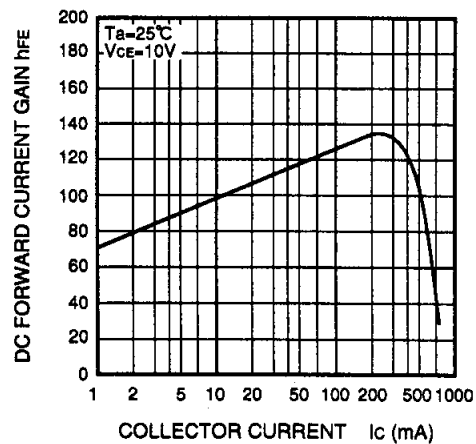
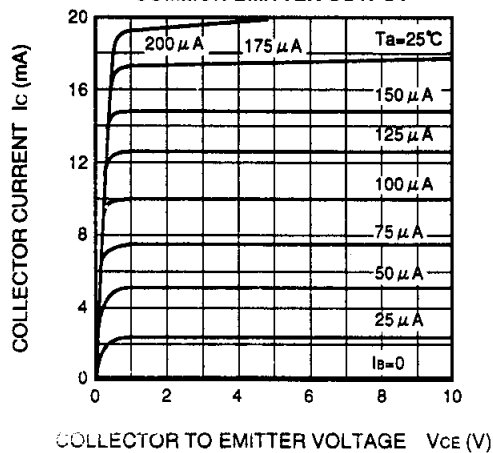
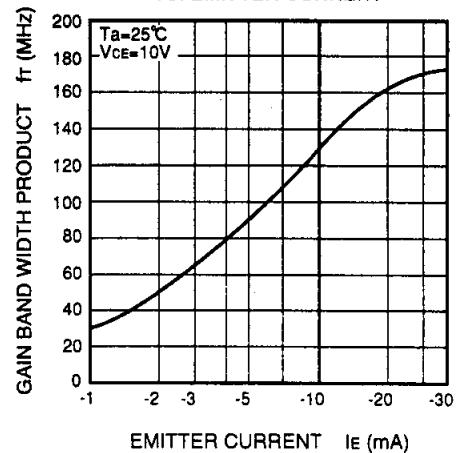
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A, I_E=0$	100			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A, I_C=0$	5			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	100			V
I_{CBO}	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

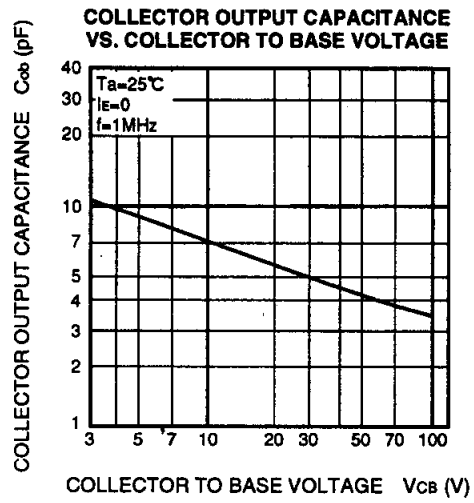
* : It shows h_{FE} classification in right table

Item	C	D	E
h_{FE}	55 to 110	90 to 180	150 to 300

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

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 NPN EPITAXIAL TYPE





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