

DESCRIPTION

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

Complementary with 2SA1284.

FEATURE

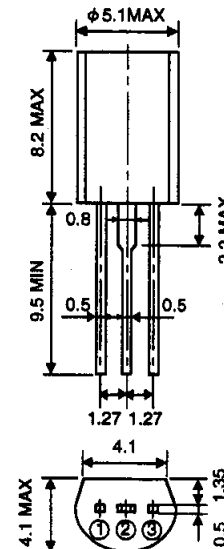
- High voltage $V_{CE0}=100V$
- High peak collector current $I_{CM}=800mA$
- High gain band width product. $f_T=130MHz$ (typ)
- High collector dissipation $P_C=900mW$

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

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

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

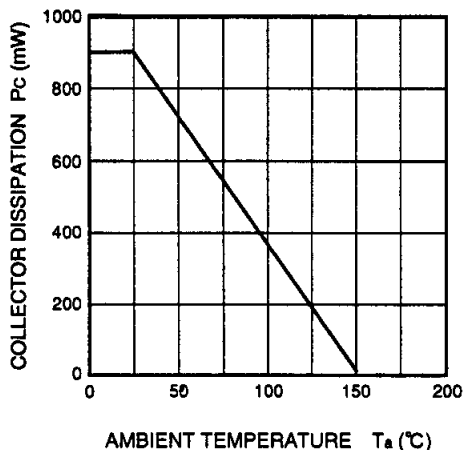
* : It shows h_{FE} classification in right table

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

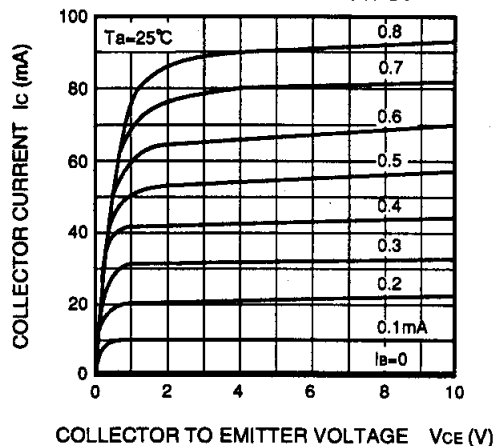
FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

TYPICAL CHARACTERISTICS

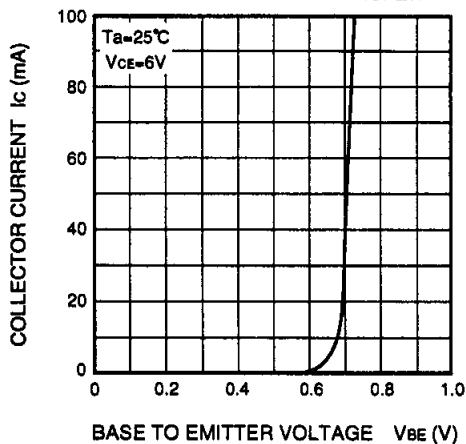
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



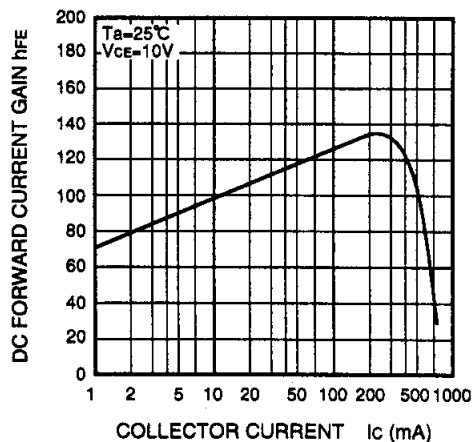
COMMON EMITTER OUTPUT



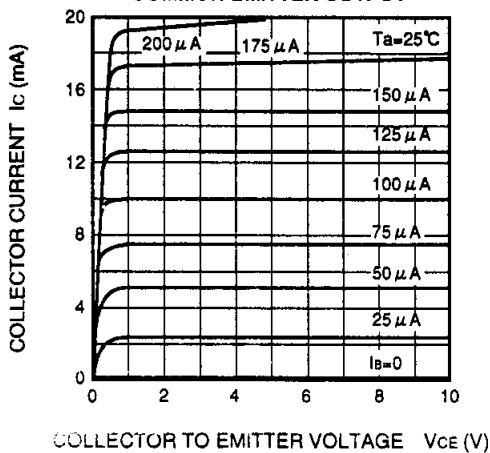
COMMON EMITTER TRANSFER



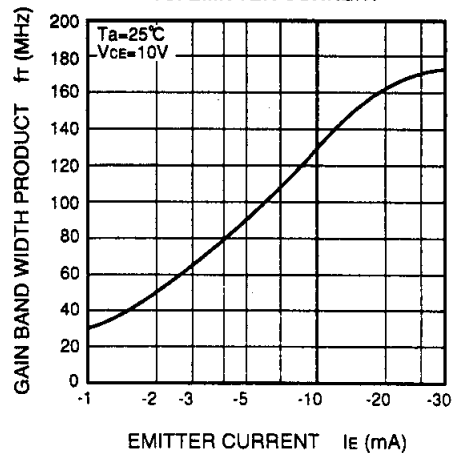
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT

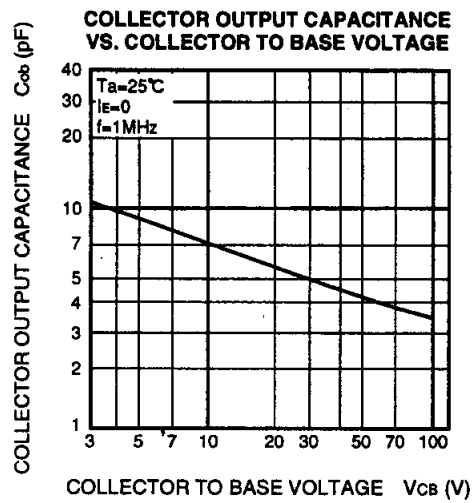


COMMON EMITTER OUTPUT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT







<http://www.idc-com.co.jp>
6-41, TSUKUBA, ISAHAYA, NAGASAKI, 854-0065, JAPAN

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