〈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

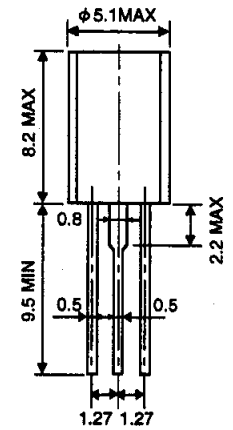
- ●High voltage V_{CEO}=100V
- ●High peak collector current I_{CM}=800mA
- ●High gain band width product. f_T=130MHz (typ)
- ●High collector dissipation P_C=900mW

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

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

Note)
The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25℃)

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(Ta=25℃)	900	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

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

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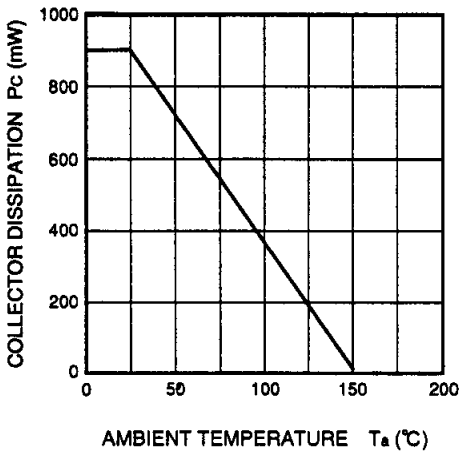
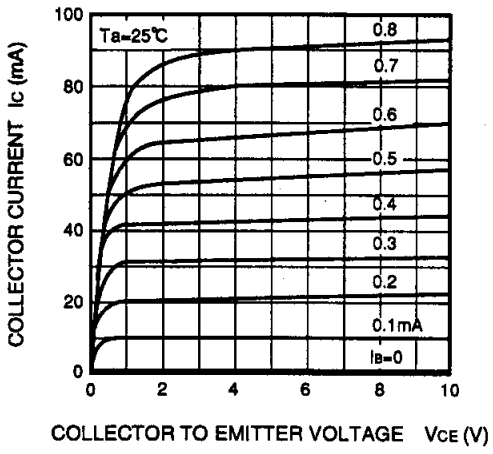
TYPICAL CHARACTERISTICS

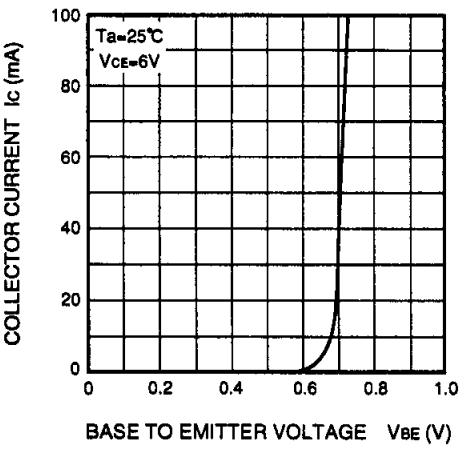
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



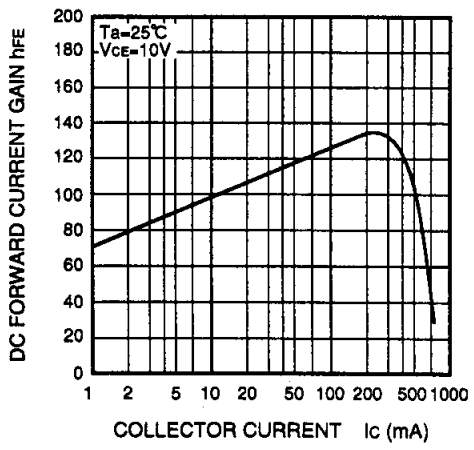
COMMON EMITTER OUTPUT



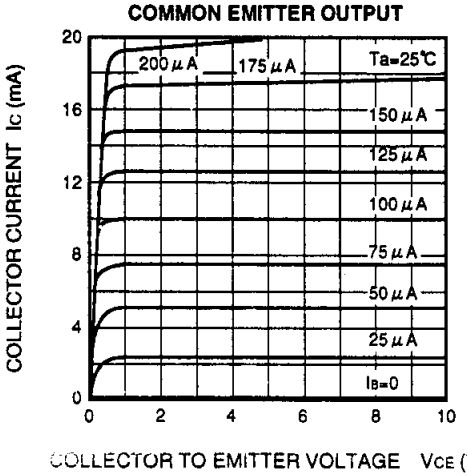
COMMON EMITTER TRANSFER



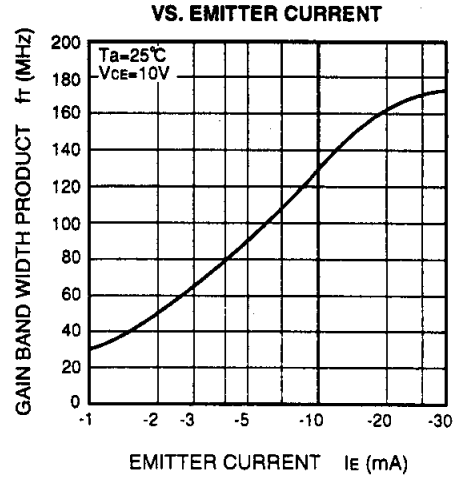
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COMMON EMITTER OUTPUT



GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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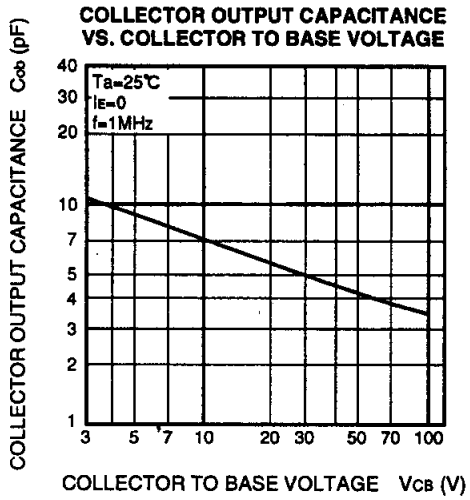

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