

**DESCRIPTION**

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

Complementary with 2SC3244.

**FEATURE**

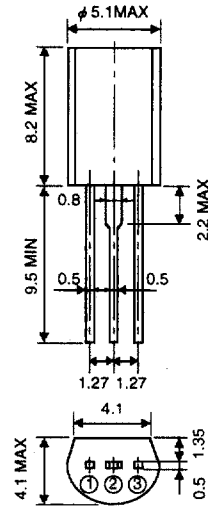
- High voltage  $V_{CE0} = -100V$
- High peak collector current  $I_{CM} = -800mA$
- High gain band width product  $f_T = 130MHz$ (typ).
- High collector dissipation  $P_C = 900mW$

**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
$V_{CB0}$	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	
$V_{(BR)CBO}$	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	$\mu A$
$I_{EBO}$	Emitter cut off current	$V_{EB} = -2V, I_C = 0$			-0.5	$\mu A$
$h_{FE} *$	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	$V_{CB} = -10V, I_E = 0, f = 1MHz$		11		pF

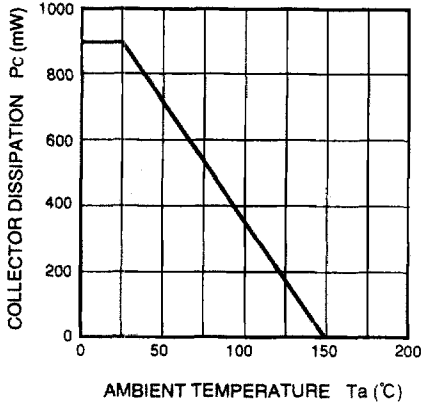
\* : It shows  $h_{FE}$  classification in right table.

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

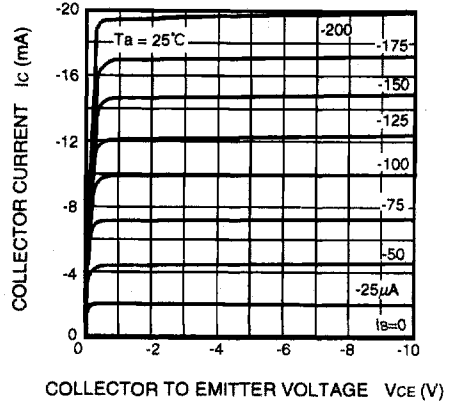
FOR LOW FREQUENCY POWER AMPLIFY APPLICATION  
SILICON PNP EPITAXIAL TYPE

**TYPICAL CHARACTERISTICS**

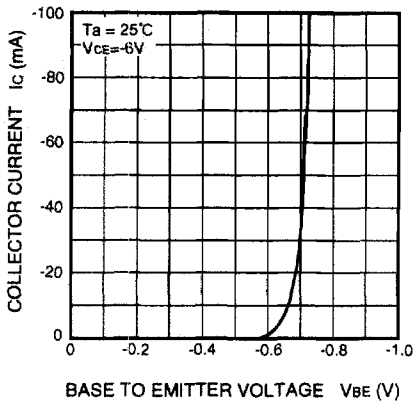
**COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE**



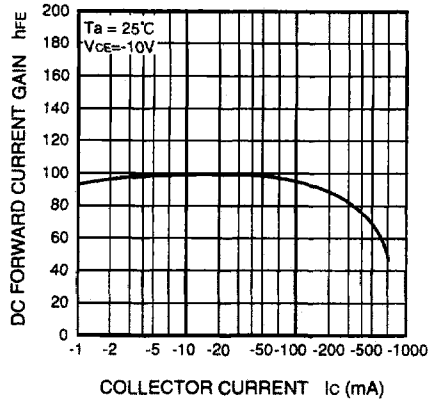
**COMMON EMITTER OUTPUT**



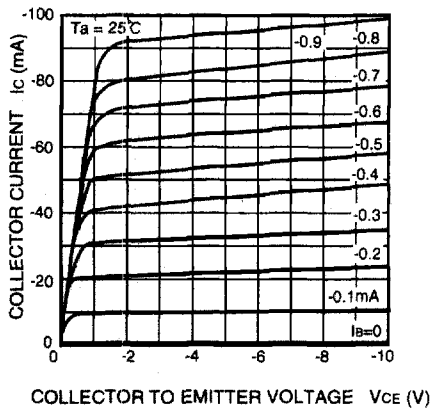
**COMMON EMITTER TRANSFER**



**DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT**



**COMMON EMITTER OUTPUT**



**GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT**

