

**DESCRIPTION**

The 2SA1287 is silicon PNP epitaxial type transistor. Designed with high Voltage, high collector current, dissipation and high hFE.  
Complementary with 2SC3247.

**FEATURE**

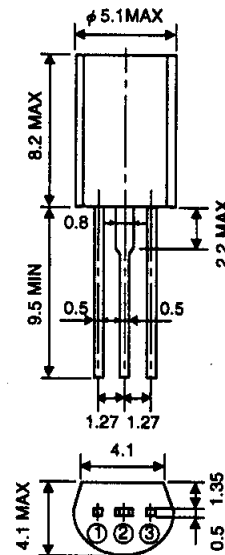
- High hFE hFE=400 to 800
- High voltage VCE=50V
- Low collector to emitter saturation voltage.  
VCE(sat)=-0.2V (@IC=-500mA, IB=-10mA)
- High collector dissipation PC=900mW

**APPLICATION**

Relay drive or power supply of audio machine, VCR, and other electronic machine.

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

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

Note) The dimension without tolerance represent central value.

**MAXIMUM RATINGS (Ta=25°C)**

Symbol	Parameter	Rated	Unit
V <sub>CB0</sub>	Collector to Base voltage	-50	V
V <sub>EB0</sub>	Emitter to Base voltage	-6	V
V <sub>CE0</sub>	Collector to Emitter voltage	-50	V
I <sub>CM</sub>	Peak collector current	-2	A
I <sub>C</sub>	Collector current	-1	A
P <sub>C</sub>	Collector dissipation(Ta=25°C)	900	mW
T <sub>J</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

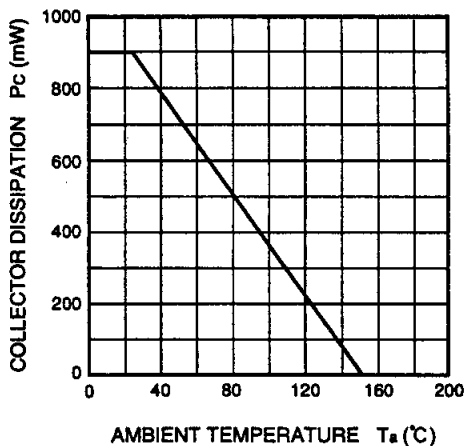
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V <sub>(BR)CBO</sub>	C to B break down voltage	I <sub>C</sub> =-10 μA, I <sub>E</sub> =0	-50			V
V <sub>(BR)EBO</sub>	E to B break down voltage	I <sub>E</sub> =-10 μA, I <sub>C</sub> =0	-6			V
V <sub>(BR)CEO</sub>	C to E break down voltage	I <sub>C</sub> =-1mA, R <sub>BE</sub> =∞	-50			V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-40V, I <sub>E</sub> =0			-0.1	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =-2V, I <sub>C</sub> =0			-0.1	μA
h <sub>FE</sub> *	DC forward current gain	V <sub>CE</sub> =-6V, I <sub>C</sub> =-100mA	400		800	—
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>C</sub> =-500mA, I <sub>B</sub> =-10mA		-0.2	-0.5	V
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =-10V, I <sub>E</sub> =10mA		90		MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		30		pF

\* : It shows hFE classification in right table.

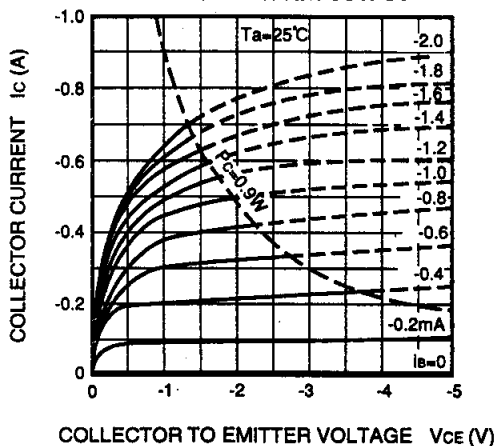
Item	G
hFE	400 to 800

**TYPICAL CHARACTERISTICS**

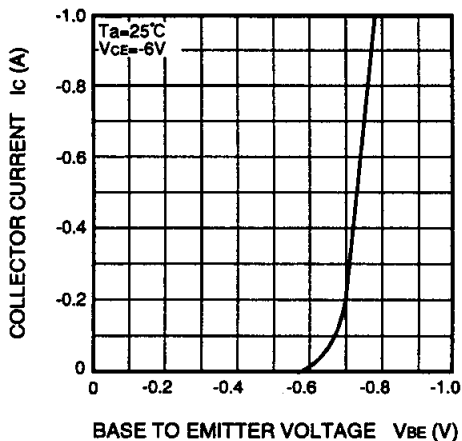
**COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE**



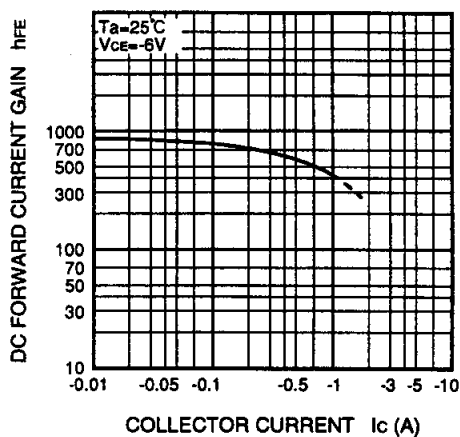
**COMMON EMITTER OUTPUT**



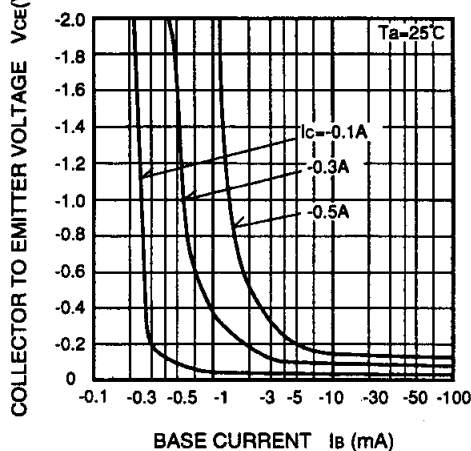
**COMMON EMITTER TRANSFER**



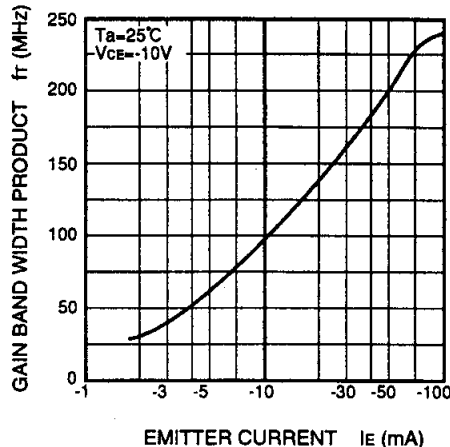
**DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT**



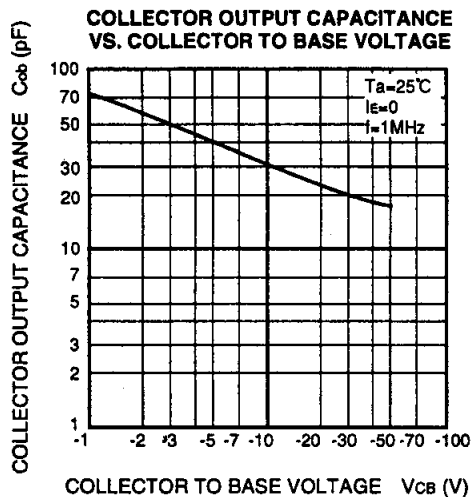
**COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT**



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



FOR RELAY DRIVE, POWER SUPPLY APPLICATION  
SILICON PNP EPITAXIAL TYPE



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