

FOR RELAY DRIVE, POWER SUPPLY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

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

Complementary with 2SC3247.

FEATURE

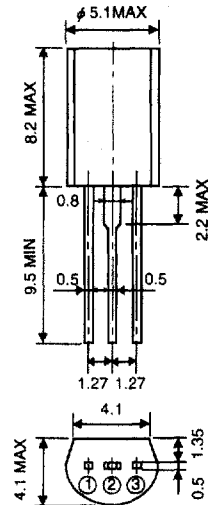
- High hFE hFE=400 to 800
- High voltage VCE0=-50V
- Low collector to emitter saturation voltage.
VCE(sat)=-0.2V (@IC=-500mA, IB=-10mA)
- High collector dissipation Pc=900mW

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	Ratings	Unit
V _{CB0}	Collector to Base voltage	-50	V
V _{EB0}	Emitter to Base voltage	-6	V
V _{CE0}	Collector to Emitter voltage	-50	V
I _{CM}	Peak collector current	-2	A
I _C	Collector current	-1	A
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)

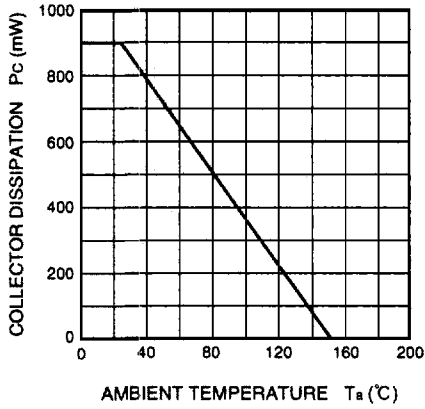
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CBO}	C to B break down voltage	I _C =-10 μA, I _E =0	-50			V
V _{(BR)EBO}	E to B break down voltage	I _E =-10 μA, I _C =0	-6			V
V _{(BR)CEO}	C to E break down voltage	I _C =-1mA, R _{BE} =∞	-50			V
I _{CBO}	Collector cut off current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

* : It shows hFE classification in right table.

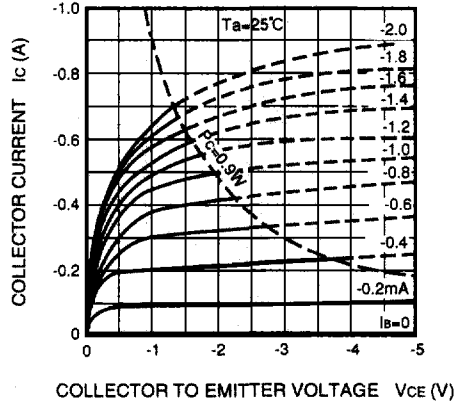
Item	G
hFE	400 to 800

TYPICAL CHARACTERISTICS

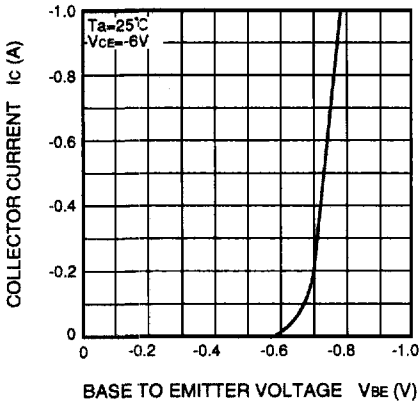
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



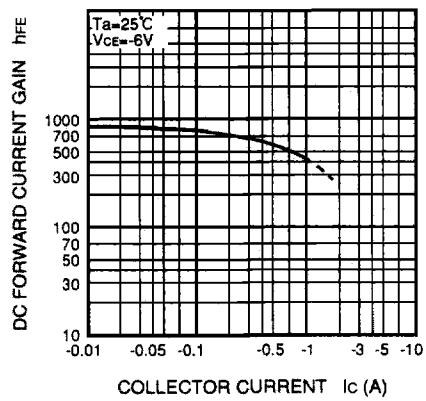
COMMON EMITTER OUTPUT



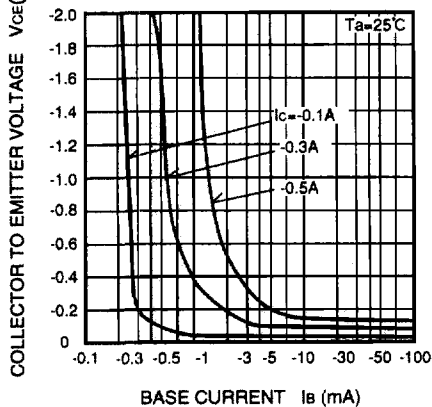
COMMON EMITTER TRANSFER



DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT

