# FOR RELAY DRIVE, POWER SUPPLY APPLICATION SILICON PNP EPITAXIAL TYPE

#### **DESCRIPTION**

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

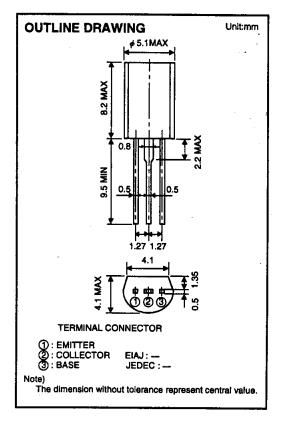
Complementary with 2SC3247.

# **FEATURE**

- ●High hFE hFE=400 to800
- ●High voltage VcEo=-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.



## MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
Vсво	Collector to Base voltage	-50	V
VEBO	Emitter to Base voltage	-6	V
VCEO	Collector to Emitter voltage	-50	V
Ісм	Peak collector current	-2	Α
lc	Collector current	-1	Α
Pc	Collector dissipation(Ta=25℃)	900	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55 to +150	ొ

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

Symbol	Parameter	Test conditions	Limits			Unit
		Tost conditions	Min	Тур	Max	]
V(BR)CBO	C to B break down voltage	IC=-10 μ A,IE=0	-50			V
V(BR)EBO	E to B break down voltage	IE=-10 μ A,IC=0	6			V
V(BR)CEO	C to E break down voltage	Ic=-1mA,RBE=∞	-50			V
Ісво	Collector cut off current	VcB=-40V,IE=0			-0.1	μΑ
IEBO	Emitter cut off current	VEB=-2V,IC=0			-0.1	μA
hfe *	DC forward current gain	Vce=-6V,lc=-100mA	400		800	
VCE(sat)	C to E saturation voltage	Ic=-500mA,Is=-10mA		-0.2	-0.5	v
fr	Gain band width product	Vce=-10V,IE=10mA		90		MHz
Соь	Collector output capacitance	VcB=-10V,IE=0, f=1MHz		30,		ρF

<sup>\*:</sup> It shows her classification in right table.

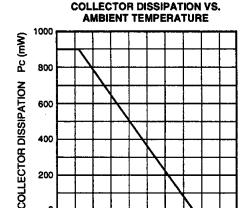
Item	G
hre	400 to 800

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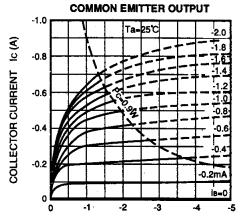


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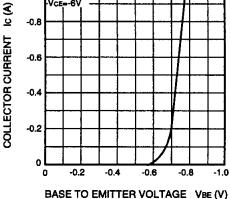


160 AMBIENT TEMPERATURE Ta (C)

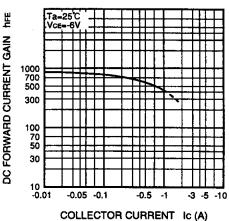


COLLECTOR TO EMITTER VOLTAGE VCE (V)

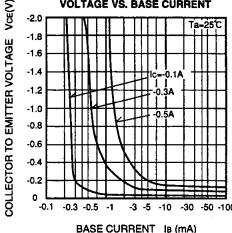
#### **COMMON EMITTER TRANSFER** -1.0 Ta=25°C



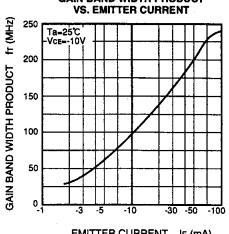
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



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

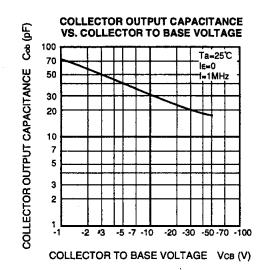


**GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT** 



EMITTER CURRENT IE (mA)

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