

# isc Silicon PNP Power Transistor

# 2SA1187

## DESCRIPTION

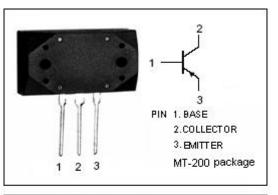
- High Collector-Emitter Breakdown Voltage-V<sub>(BR)CEO</sub>= -150V(Min)
- Good Linearity of  $h_{\text{FE}}$
- Complement to Type 2SC2838
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

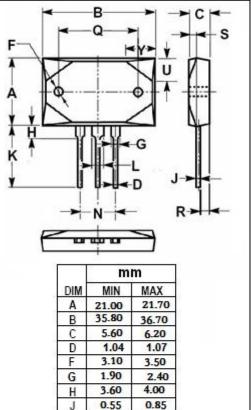
## **APPLICATIONS**

· For audio and general purpose applications

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	-150	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-150	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
lc	Collector Current-Continuous	-12	A
I <sub>B</sub>	Base Current-Continuous	-3	A
Pc	Collector Power Dissipation @ $T_C$ =25 °C	120	W
TJ	Junction Temperature	150	Ĉ
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C





20.80

3.40

11.10

24.50

3.30

2.20

7.10

9.10

Κ

N

Q

R

SU

Y

20.00

2.90

10.50

24.00

2.90

6.90

8.90



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# **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -25mA ; I <sub>B</sub> = 0	-150			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -5.0A; I <sub>B</sub> = -0.5A			-2.0	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -150V ; I <sub>E</sub> =0			-100	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> =0			-100	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -3A ; V <sub>CE</sub> = -4V	50		180	
Сов	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = -80V;f= 1.0MHz		110		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 1A ; V <sub>CE</sub> = -12V		60		MHz

### h<sub>FE</sub> Classifications

0	Р	Y	
50-80	80-130	130-180	

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