

# isc Silicon PNP Power Transistor

# 2SB1162

# DESCRIPTION

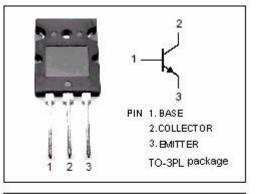
- Collector-Emitter Breakdown Voltage-: V<sub>(BR)CEO</sub>= -160V(Min)
- Good Linearity of h<sub>FE</sub>
- Wide Area of Safe Operation
- Complement to Type 2SD1717
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

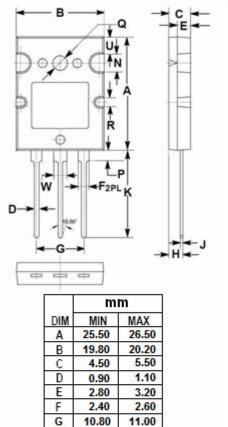
# APPLICATIONS

Designed for high power amplifier applications

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage -160		V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-160	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
lc	Collector Current-Continuous	-12	А	
I <sub>CP</sub>	Collector Current-Pulse -:		Α	
Pc	Collector Power Dissipation @ Tc=25℃	120	W	
	Collector Power Dissipation @ $T_a=25^{\circ}C$	3.5		
TJ	Junction Temperature	150 °C		
T <sub>stg</sub>	T <sub>stg</sub> Storage Temperature Range		°C	

# ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)





3.10

0.50

20.00

3.90

2.40

3.10

1.90

3.90

2.90

H

κ

N

Ρ

Q

R

U

W

3.30

0.70

21.00

4.50

2.60

3.50

2.60

4.10

3.25

isc website: <u>www.iscsemi.com</u>



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# **ELECTRICAL CHARACTERISTICS**

#### $T_{\text{C}}\text{=}25^{\circ}\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8A; I <sub>B</sub> = -0.8A			-2.0	V
V <sub>BE(on)</sub>	Base -Emitter On Voltage	I <sub>C</sub> = -8A; V <sub>CE</sub> = -5V			-1.8	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -160V; I <sub>E</sub> = 0			-50	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -3V; I <sub>C</sub> = 0			-50	μA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -20mA; V <sub>CE</sub> = -5V	20			
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V	60		200	
h <sub>FE-3</sub>	DC Current Gain	I <sub>C</sub> = -8A; V <sub>CE</sub> = -5V	20			
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1.0MHz		210		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V		20		MHz

# h<sub>FE-2</sub> Classifications

Q	S	Р
60-120	80-160	100-200

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