

# isc Silicon PNP Power Transistor

# 2SB1317

### **DESCRIPTION**

- · Good Linearity of hFE
- · Wide Area of Safe Operation
- High DC Current-Gain Bandwidth Product
- Complement to Type 2SD1975
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

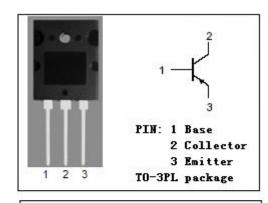


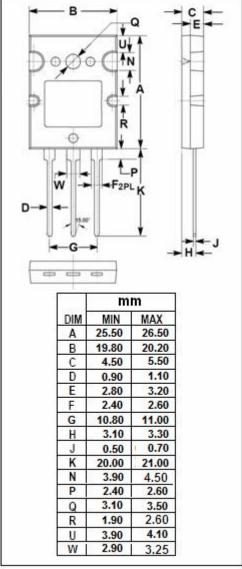
### **APPLICATIONS**

- High power amplification
- Optimum for the output stage of a Hi-Fi audio amplifier.

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>СВО</sub>	Collector-Base Voltage	-180	V
Vceo	Collector-Emitter Voltage	-180	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
Ic	Collector Current-Continuous	-15	Α
Ісм	Collector Current-Peak	-25	А
Pc	Collector Power Dissipation @ T <sub>a</sub> =25℃	3.5	w
	Collector Power Dissipation @ $T_c$ =25 $^{\circ}$ C	150	VV
TJ	Junction Temperature 150		$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range -55~150		$^{\circ}$







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#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -10A; I <sub>B</sub> = -1A			-2.5	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -8A; V <sub>CE</sub> = -5V			-1.8	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -180V ; I <sub>E</sub> = 0			-50	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -3V; I <sub>C</sub> = 0			-50	μА
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		450		pF
f⊤	Current-Gain—Bandwidth Product	Ic= -0.5A;VcE= -5V;ftest= 1.0MHz		20		MHz

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

Q	S	Р
60-120	80-160	100-200

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