



# isc Silicon NPN Power Transistor

## **DESCRIPTION**

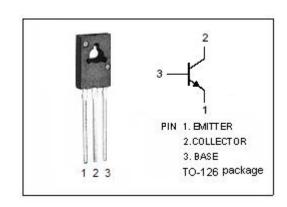
- · Collector-Emitter Breakdown Voltage
  - : V<sub>(BR)CEO</sub>= 100V(Min)
- Good Linearity of hFE
- Complement to Type 2SA794
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

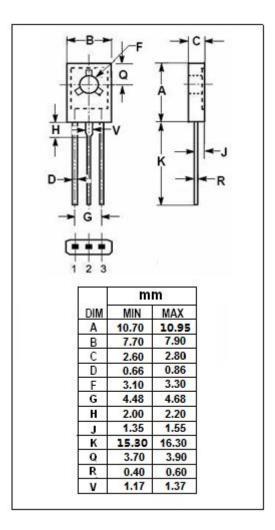
## **APPLICATIONS**

- Designed for low-frequency high power driver.
- Optimum for the driver stage of low-frequency and 40W to 100W output amplifier.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	100	V	
Vceo	Collector-Emitter Voltage	100	V	
$V_{EBO}$	Emitter-Base Voltage	5	V	
lc	Collector Current-Continuous	0.5	Α	
Іср	Collector Current-Peak	1	А	
Pc	Collector Power Dissipation @ T <sub>a</sub> =25 ℃	1.2	W	
TJ	T <sub>J</sub> Junction Temperature		$^{\circ}$	
T <sub>stg</sub>	T <sub>stg</sub> Storage Temperature Range		$^{\circ}$	







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2SC1567

#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 0.1mA ; I <sub>B</sub> = 0	100			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown VItage	I <sub>E</sub> = 1 μ A; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 500mA; I <sub>B</sub> = 50mA			0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I <sub>C</sub> = 500mA; I <sub>B</sub> = 50mA			1.2	V
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 150mA; V <sub>CE</sub> = 10V	90		330	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 500mA; V <sub>CE</sub> = 5V	50			
fτ	Current-Gain—Bandwidth Product	I <sub>E</sub> = -50mA ; V <sub>CB</sub> = 10V		120		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V,f <sub>test</sub> = 1MHz		11		pF

## ♦ h<sub>FE1</sub> Classifications

Q	R	S
90-155	130-220	185-330

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