

# **isc Silicon NPN Power Transistor**

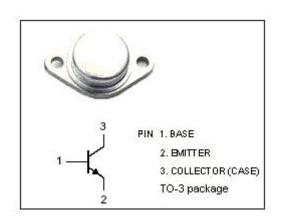
#### **DESCRIPTION**

Good Linearity of hFE

- · Collector-Emitter Sustaining Voltage-
  - : V<sub>CEO(SUS)</sub>= 150V (Min)
- · Wide Area of Safe Operation
- Complement to Type 2SA1065
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

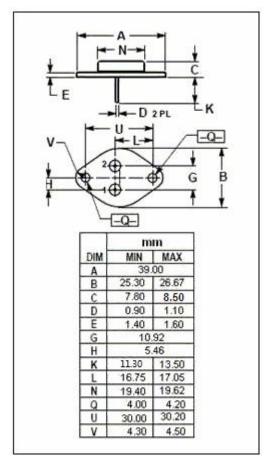
### **APPLICATIONS**

• Designed for AF amplifier, high power amplifier applications.



# ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MAX	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	150	V
VCEO	Collector-Emitter Voltage	150	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current-Continuous	10	Α
Ісм	Collector Current-Peak	15	Α
Pc	Collector Power Dissipation @Tc=25℃	120	W
T <sub>j</sub>	Junction Temperature	150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range	-65~150	${\mathbb C}$





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### **ELECTRICAL CHARACTERISTICS**

Tc=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 50mA ; I <sub>E</sub> = 0	150			V
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> = 10A ; V <sub>CE</sub> = 5V			2.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 70V; I <sub>E</sub> = 0			1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			2	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 2A; V <sub>CE</sub> = 5V	40		280	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 10A; V <sub>CE</sub> = 5V	30			
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 10V		50		MHz

## ♦ h<sub>FE-1</sub> Classifications

R	Q	Р	0
40-80	60-120	90-180	140-280

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