

## **isc** Silicon PNP Power Transistor

## 2SA1003

## DESCRIPTION

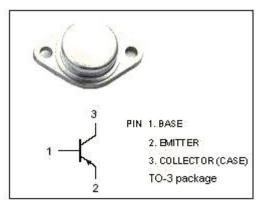
- High Current Capability
- Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= -150V(Min.)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

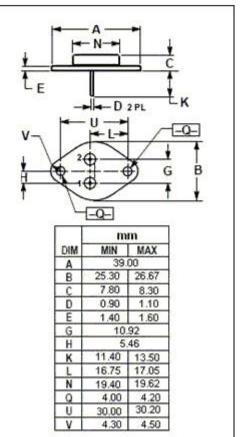
#### **APPLICATIONS**

• Designed for audio and general purpose applications.

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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	-6	V	
lc	Collector Current-Continuous	-12	А	
Pc	Collector Power Dissipation @T <sub>c</sub> =25°C	120	W	
Tj	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature	-55~150	°C	







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## **ELECTRICAL CHARACTERISTICS**

#### Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -30mA; I <sub>B</sub> = 0	-150			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>E</sub> = 0	-150			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA; I <sub>C</sub> = 0	-6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -8Α; I <sub>B</sub> = -0.8Α			-3.0	V
І <sub>сво</sub>	Collector Cutoff Current	V <sub>CB</sub> = -150V; I <sub>E</sub> = 0			-50	μA
Іево	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> = 0			-50	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -5V	50		200	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -10V		40		MHz

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