

**isc Silicon PNP Power Transistor**
**2SA1001**
**DESCRIPTION**

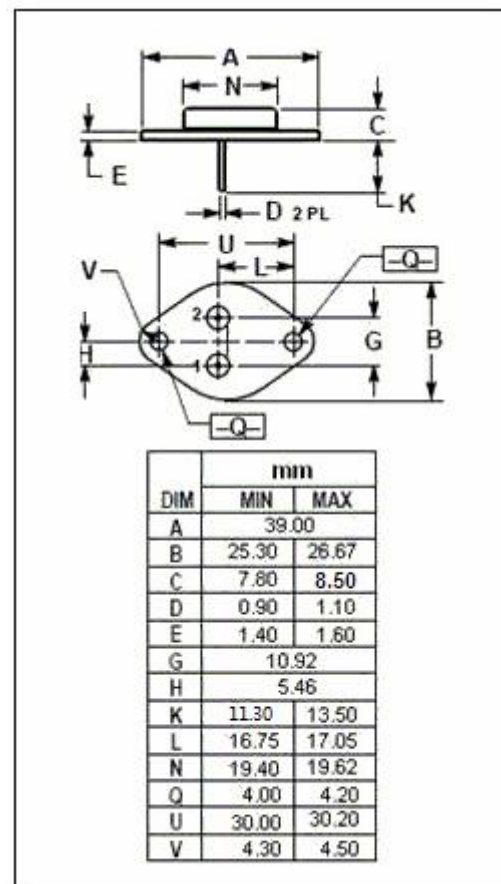
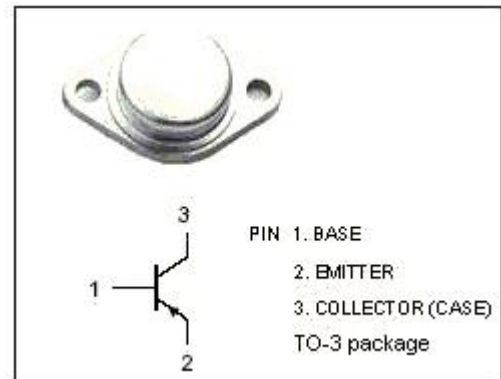
- High Current Capability
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -130V(\text{Min.})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for audio and general purpose applications.

**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-130	V
$V_{CEO}$	Collector-Emitter Voltage	-130	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-8	A
$P_C$	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	80	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



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**ELECTRICAL CHARACTERISTICS**

 T<sub>j</sub>=25°C 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	-130			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>E</sub> = 0	-130			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> = -5A; I <sub>B</sub> = -0.5A			-2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -130V; I <sub>E</sub> = 0			-50	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V; I <sub>C</sub> = 0			-50	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -5V	50		200	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -10V		40		MHz

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