

## isc Silicon NPN Power Transistor

## 2SC1449

### DESCRIPTION

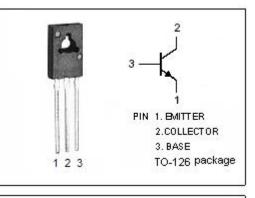
- High Collector Current I<sub>C</sub>= 2.0A
- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= 35V(Min)
- · Good Linearity of hFE
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

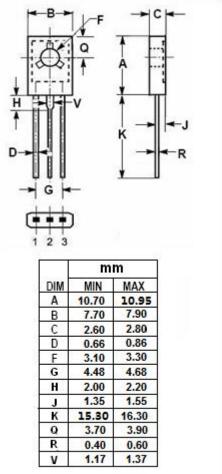
#### APPLICATIONS

• Designed for low frequency power amplifier applications.

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	40	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	35	V	
$V_{\text{EBO}}$	Emitter-Base Voltage	5	V	
lc	Collector Current-Continuous	2.0	А	
Pc	Collector Power Dissipation @ $T_C$ =25°C	1	w	
	Collector Power Dissipation @ T <sub>a</sub> =25℃	10		
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C	

### ABSOLUTE MAXIMUM RATINGS(Ta=25 °C)





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### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 1mA ; I <sub>E</sub> = 0	40			V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	$I_{C}$ = 10mA ; $R_{BE}^{=} \infty$	35			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Vltage	I <sub>E</sub> = 1mA ; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 0.5A; I <sub>B</sub> = 0.05A			0.7	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 0.5A; I <sub>B</sub> = 0.05A			1.5	V
Ісво	Collector Cutoff Current	V <sub>CB</sub> = 40V; I <sub>E</sub> = 0			100	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 300mA ; V <sub>CE</sub> = 2V	40		250	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 100mA ; V <sub>CE</sub> = 5V		55		MHz

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