

**isc Silicon NPN Power Transistor**
**2SC1904**
**DESCRIPTION**

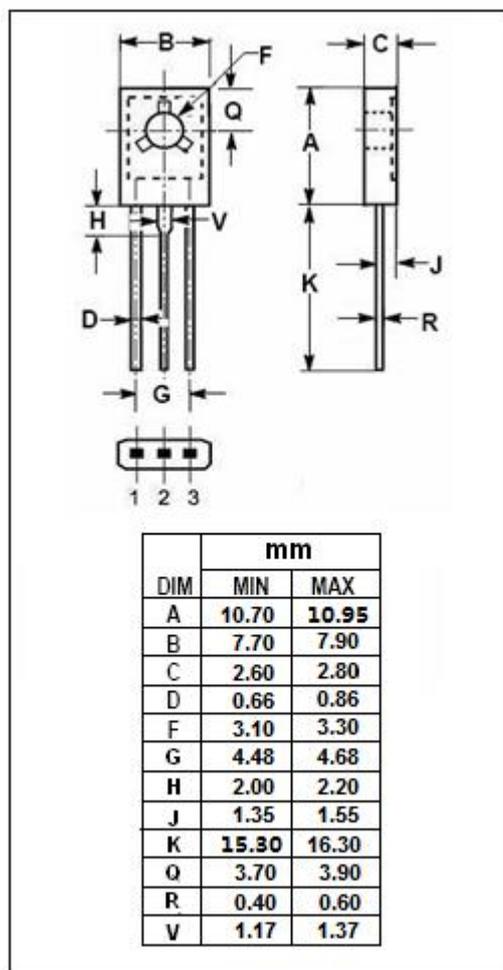
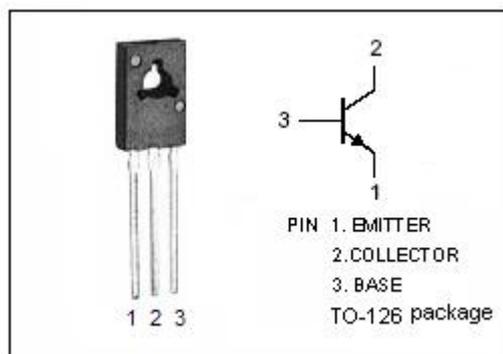
- Low collector to emitter saturation voltage
- Output of 1W can be obtained by a complementary with 2SA899
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- High frequency power amplification

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	150	V
V <sub>CEO</sub>	Collector-Emitter Voltage	150	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>c</sub>	Collector Current-Continuous	50	mA
P <sub>c</sub>	Collector Power Dissipation @ T <sub>a</sub> =25°C	1	W
	Collector Power Dissipation @ T <sub>c</sub> =25°C	4	
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 1mA			0.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 1mA			1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 140V; I <sub>E</sub> = 0			1.0	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			1.0	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 10mA ; V <sub>CE</sub> = 5V	35		500	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 10mA ; V <sub>CE</sub> = 5V		70		MHz

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