

# **ISC Silicon NPN Power Transistor**

### **DESCRIPTION**

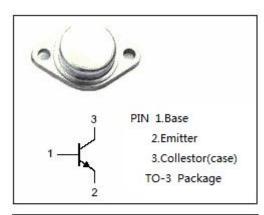
- With TO-3 Package
- · High breakdown voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

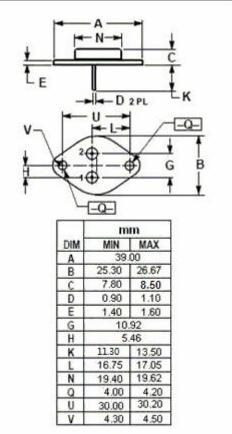
### **APPLICATIONS**

 for use in horizontal deflection output stages for color TV receives

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	1100	V
$V_{\text{CEO}}$	Collector-Emitter Voltage	700	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current-Continuous	0.5	Α
I <sub>B</sub>	Base Current-Continuous	0.1	Α
Pc	Collector Power Dissipation	50	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$







## **ISC Silicon NPN Power Transistor**

2SC1004

### **ELECTRICAL CHARACTERISTICS**

 $T_{\text{C}}$ =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> = 150mA; I <sub>B</sub> = 30mA			5.0	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = 150mA; I <sub>B</sub> = 30mA			1.5	V
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA; I <sub>B</sub> = 0	700			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	5			V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 800V; I <sub>E</sub> = 0			1	uA
ІЕВО	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			1	uA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.15A; V <sub>CE</sub> = 15V	30		160	
f⊤	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.15A; V <sub>CE</sub> = 15V		2		MHz

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