

### **isc Silicon NPN Power Transistor**

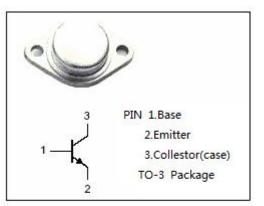
# 2SC1894

### DESCRIPTION

- With TO-3 Package
- · Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

### APPLICATIONS

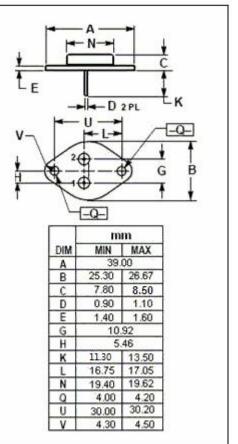
 Designed for switching and wide-band amplifier applications



#### ABSOLUTE MAXIMUM RATINGS(Ta=25℃) VALUE UNIT SYMBOL PARAMETER V<sub>СВО</sub> Collector-Base Voltage 1500 V Collector-Emitter Voltage VCEO 600 V $V_{\text{EBO}}$ Emitter-Base Voltage 5 V lc **Collector Current-Continuous** 5 А **Collector Power Dissipation** Pc W 50 @ Tc=25℃ °C ΤJ **Junction Temperature** 150 Storage Temperature Range -55~150 °C Tstg

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT	
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.5	°C/W	



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### **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 4A; I <sub>B</sub> = 0.8A		5.0	V
V <sub>BE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 4A; I <sub>B</sub> = 0.8A		1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> =750V;I <sub>B</sub> = 0		50	uA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> =0		50	uA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V	10	40	

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