

# 2SC3694

Silicon NPN Transistors

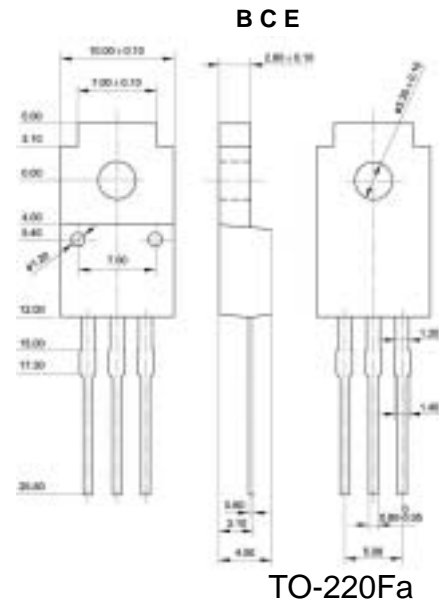


## ◆ Features

- . With TO-220Fa package
- . High speed ,power switching applications

## ◆ Absolute Maximum Ratings Tc=25

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CB0</sub>	Collector to base voltage	100	V
V <sub>CEO</sub>	Collector to emitter voltage	60	V
V <sub>EBO</sub>	Emitter to base voltage	5	V
I <sub>C</sub>	Collector current	15	A
P <sub>C</sub>	Collector power dissipation	30	W
T <sub>j</sub>	Junction temperature	150	
T <sub>stg</sub>	Storage temperature	-55~150	



## ◆ Electrical Characteristics Tc=25

SYMBOL	PARAMETER	CONDITIONS	MIN	Typ.	MAX	UNIT
I <sub>CB0</sub>	Collector cut-off current	V <sub>CB</sub> =60V; I <sub>E</sub> =0			10	uA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			10	uA
I <sub>CEO</sub>	Collector cut-off current					
V <sub>CB0</sub>	Collector-base breakdown voltage					
V <sub>CEO(SUS)</sub>	Collector-emitter Sustaining voltage	I <sub>C</sub> =30mA; I <sub>B</sub> =0	60			V
V <sub>EBO</sub>	Emitter-base breakdown voltage					
V <sub>CE(sat-1)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =12A; I <sub>B</sub> =0.6A			0.5	V
V <sub>CE(sat-2)</sub>	Collector-emitter saturation voltages					
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =3A; V <sub>CE</sub> =2V	100		400	
h <sub>FE-2</sub>	Forward current transfer ratio					
V <sub>BE(sat)1</sub>	Base-emitter saturation voltages	I <sub>C</sub> =12A; I <sub>B</sub> =0.6A			1.5	V
V <sub>BE(sat)2</sub>	Base-emitter saturation voltages					
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A; V <sub>CE</sub> =10V		120		MHz
C <sub>ob</sub>	Collector Out put Capacitance	I <sub>C</sub> =0, V <sub>CB</sub> =10V f=1MHz		180		pF