

## Silicon NPN Power Transistors

2SC2594

## DESCRIPTION

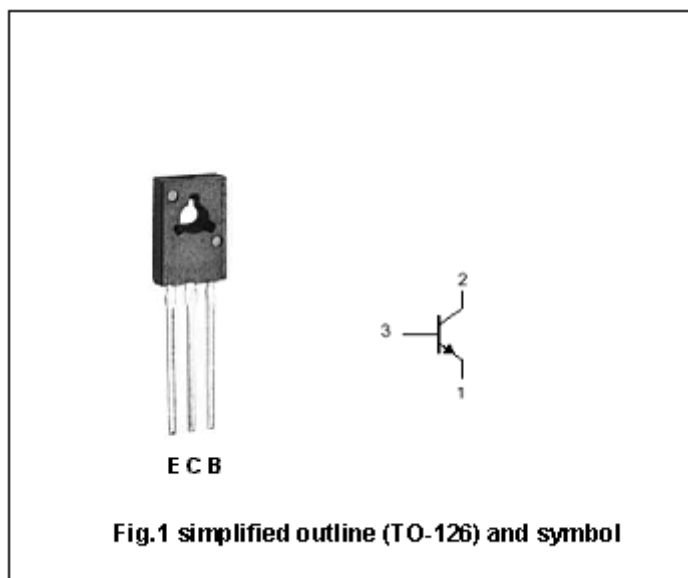
- With TO-126 package
- Low saturation voltage

## APPLICATIONS

- AF power amplifier
- For electronic flash unit
- Converter

## PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

ABSOLUTE MAXIMUM RATINGS ( $T_C=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	40	V
$V_{CEO}$	Collector-emitter voltage	Open base	20	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current -DC		5	A
$I_{CM}$	Collector current-Peak		7	A
$P_C$	Collector power dissipation	$T_C=25^\circ\text{C}$	10	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =1mA I <sub>B</sub> =0	20			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =10 μ A ; I <sub>E</sub> =0	40			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10 μ A ; I <sub>C</sub> =0	7			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =3.0A ; I <sub>B</sub> =0.1A(Pulse test)			1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =10V ; I <sub>E</sub> =0			0.1	μ A
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5A ; V <sub>CE</sub> =2V(Pulse test)	140		450	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =2V(Pulse test)	70			
f <sub>T</sub>	Transition frequency	I <sub>E</sub> =-50mA ; V <sub>CB</sub> =6V		150		MHz
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0 ; V <sub>CB</sub> =20V, f=1MHz			50	pF

PACKAGE OUTLINE

