

Silicon NPN Power Transistors

2SC2594

DESCRIPTION

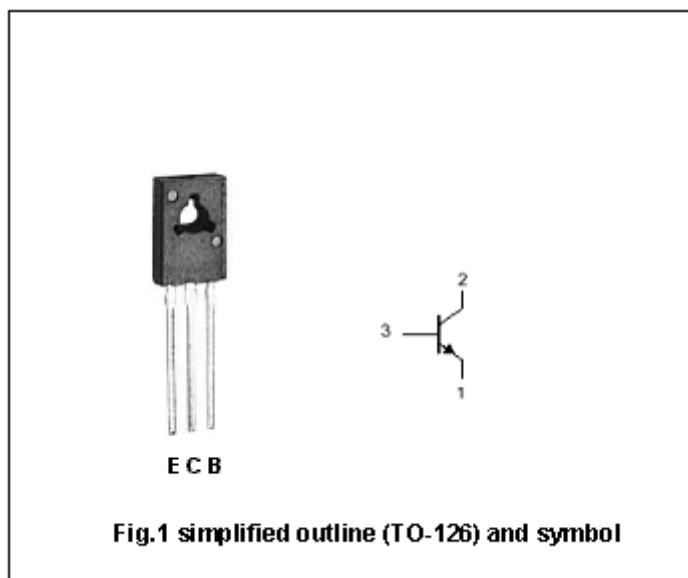
- With TO-126 package
- Low saturation voltage

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_j=25°C unless otherwise specified

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

PACKAGE OUTLINE

