

Silicon PNP Power Transistors

2SB993

DESCRIPTION

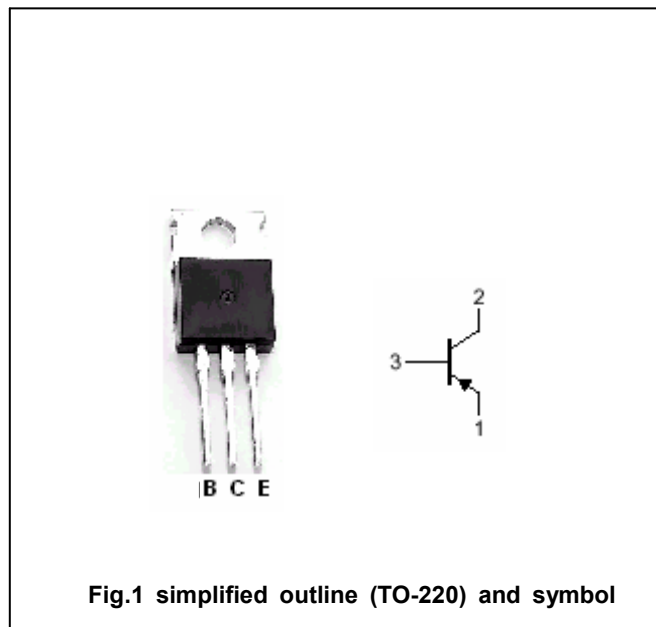
- With TO-220 package
- Low collector saturation voltage
- Large current capacity

APPLICATIONS

- Suitable for relay drivers,high-speed Inverters,converters,and other general large-current switching applications

PINNING

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

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-70	V
V_{CEO}	Collector-emitter voltage	Open base	-50	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-7	A
I_{CM}	Collector current-peak		-10	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	40	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, R _{BE} =∞	-50			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA, I _E =0	-70			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA, I _C =0	-7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-4A; I _B =-0.4A			-0.4	V
I _{CBO}	Collector cut-off current	V _{CB} =-50V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-10	μA
h _{FE-1}	DC current gain	I _C =-1A; V _{CE} =-1V	70		240	
h _{FE-2}	DC current gain	I _C =-4A; V _{CE} =-1V	30			
f _T	Transition frequency	I _C =-1A; V _{CE} =-5V		10		MHz

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PACKAGE OUTLINE



Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)