

Silicon PNP Power Transistors

2SB703

DESCRIPTION

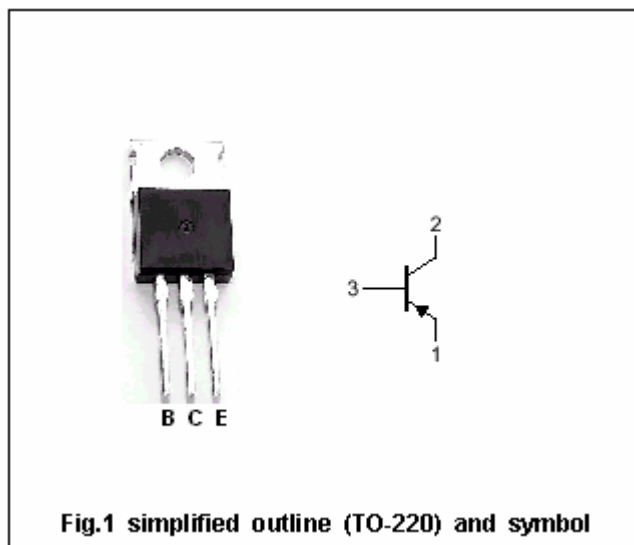
- With TO-220C package
- Complement to type 2SD743
- High power dissipation

APPLICATIONS

- Designed for use in audio frequency power amplifier, low speed switching applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-80	V
V _{CEO}	Collector-emitter voltage	Open base	-80	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-4	A
I _{CM}	Collector current-peak		-6	A
I _B	Base current		-1	A
P _D	Total power dissipation	T _C =25°C	40	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance from junction to case	3.125	°C/W

Silicon PNP Power Transistors

2SB703

CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA; I _B =0	-80			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1.0mA; I _E =0	-80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1.0mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-3V; I _C =0			-10	μA
h _{FE-1}	DC current gain	I _C =-20mA ; V _{CE} =-5V	30			
h _{FE-2}	DC current gain	I _C =-500mA ; V _{CE} =-5V	40		200	
f _T	Transition frequency	I _C =-100mA ; V _{CE} =-5V, f=1MHz	10			MHz

◆ h_{FE-2} Classifications

S	R	Q
40-80	60-120	100-200

