

Silicon NPN Power Transistors

2SC1501

DESCRIPTION

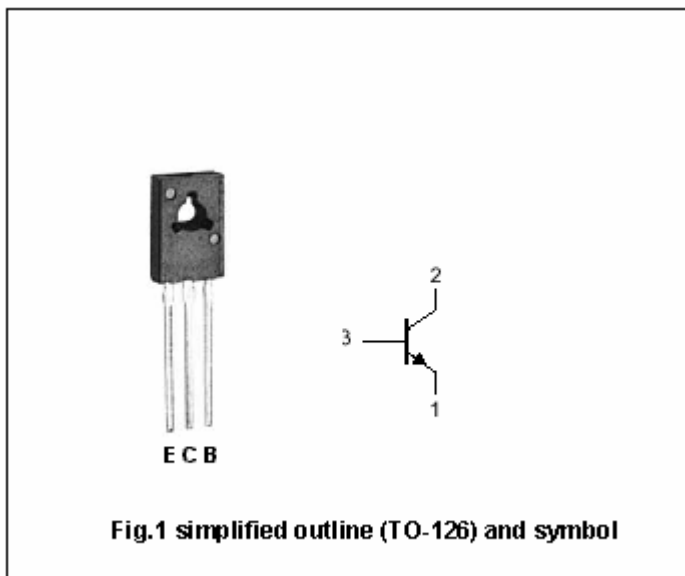
- With TO-126 package
- High breakdown voltage
- Large power dissipation

APPLICATIONS

- For medium power amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	300	V
V _{CEO}	Collector-emitter voltage	Open base	300	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		0.1	A
I _{CM}	Collector current-peak		0.15	A
P _C	Collector power dissipation	T _C =25°C	10	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100μA; I _E =0	300			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA; I _B =0	300			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100μA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =100mA I _B =10mA			5.0	V
V _{BE}	Base-emitter on voltage	I _C =50mA; V _{CE} =10V			1.2	V
h _{FE-1}	DC current gain	I _C =10mA; V _{CE} =10V	30			
h _{FE-2}	DC current gain	I _C =50mA; V _{CE} =10V	30		200	
I _{CBO}	Collector cut-off current	V _{CB} =300V; I _E =0			100	μA
C _{OB}	Output capacitance	I _E =0; V _{CB} =30V; f=1MHz		8		pF
f _T	Transition frequency	I _E =20mA; V _{CB} =30V		55		MHz

◆ h_{FE-2} classifications

P	Q	R	S
30-60	50-100	80-150	100-200

