

Silicon NPN Power Transistors

2SC1516

DESCRIPTION

With TO-220 package

·Low collector saturation voltage

APPLICATIONS

·For medium power amplifier applicatons

PINNING

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

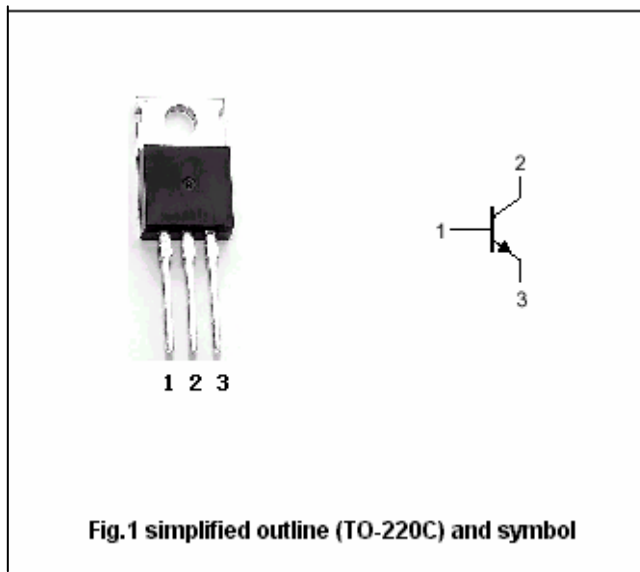


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	35	V
V _{CEO}	Collector-emitter voltage	Open base	35	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		1.5	A
I _{CM}	Collector current-peak		3.0	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)CEO}	Collector-emitter breakdown voltage	I _C =25mA, I _B =0	35			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA, I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =1A; I _B =0.1A			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =1A; I _B =0.1A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =35V; I _E =0			20	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			20	μA
h _{FE}	DC current gain	I _C =0.5A; V _{CE} =2V	60		200	
f _T	Transition frequency	I _C =0.2A; V _{CE} =10V		110		MHz

◆ h_{FE} Classifications

B	C
60-120	100-200

