

Silicon NPN Power Transistors

2SC1507

DESCRIPTION

- With TO-220 package
- High collector-emitter voltage
: $V_{CEO}=300V$
- High frequency: $f_T=40MHz$ (Min)

APPLICATIONS

- For color TV chroma output applications

PINNING

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

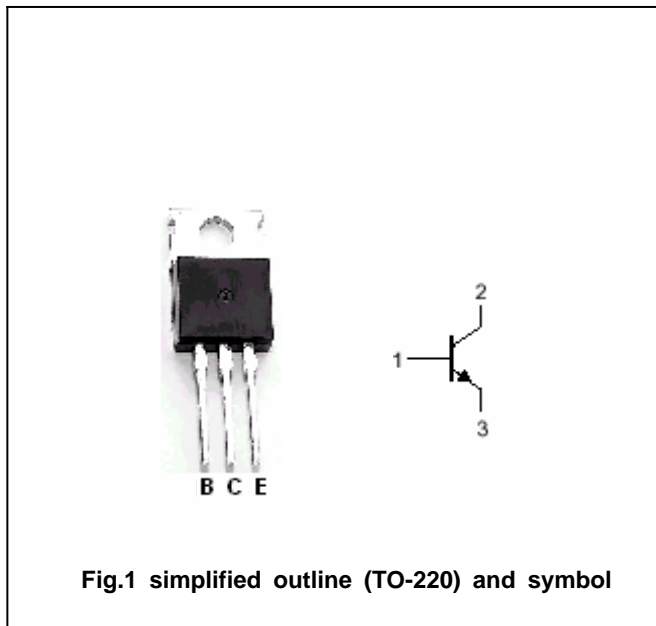


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings (Ta=25)

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	7	V
I_C	Collector current		0.2	A
P_C	Collector power dissipation	$T_C=25$	15	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =10 μ A ; I _E =0	300			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	300			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10 μ A ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =50mA ; I _B =5mA			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =200V; I _E =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			100	μ A
h _{FE}	DC current gain	I _C =10mA ; V _{CE} =10V	40		240	
C _{OB}	Output capacitance	I _E =0; V _{CB} =50V; f=1MHz		4		pF
f _T	Transition frequency	I _C =10mA ; V _{CE} =30V	40	80		MHz

◆ h_{FE} classifications

R	O	Y
40-80	70-140	120-240

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PACKAGE OUTLINE

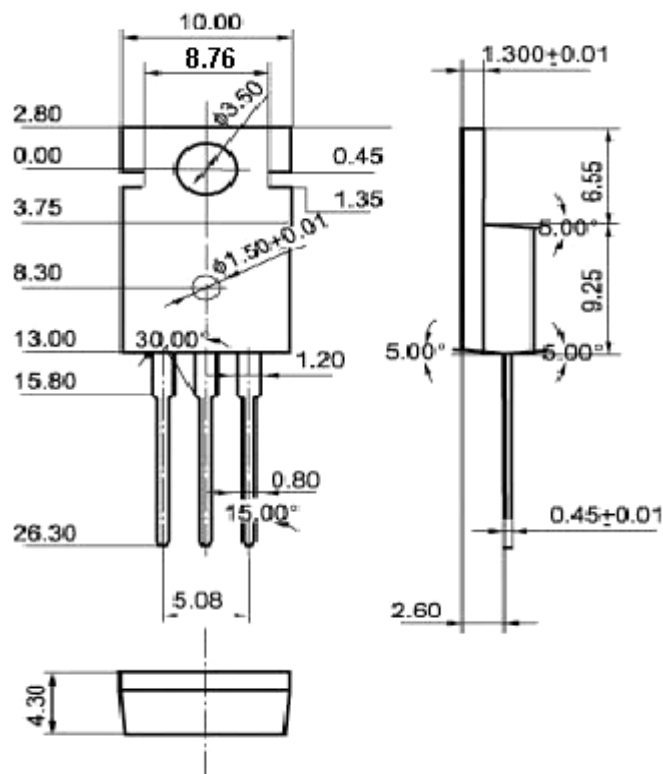


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)