

Silicon NPN Power Transistors

2SC1505

DESCRIPTION

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

APPLICATIONS

- For use in line-operated color TV chroma output circuits and sound output circuits.

PINNING

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

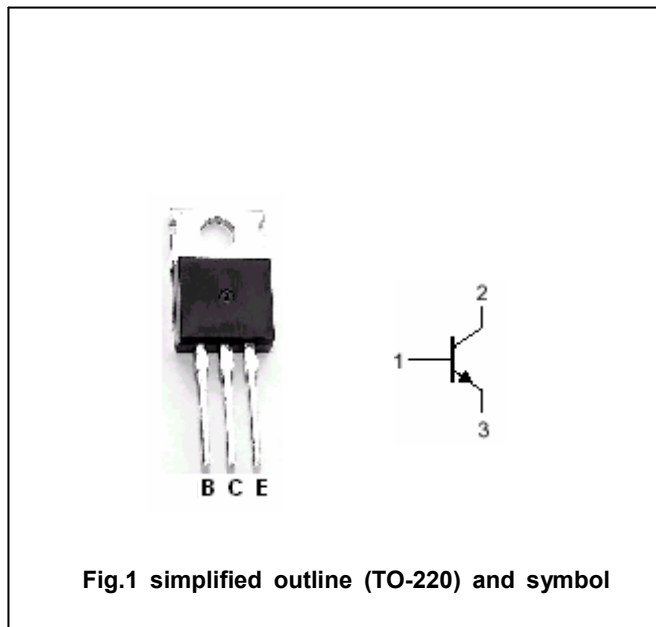


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings (Ta=25°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	7	V
I_C	Collector current		0.2	A
P_T	Collector power dissipation	$T_a=25^\circ C$	1.2	W
		$T_C=25^\circ C$	15	
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 =10μA ; 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 =10μA ; 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			0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			0.1	μA
h _{FE}	DC current gain	I _C =10mA ; V _{CE} =10V	40		200	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =50V ; f=1MHz			4.5	pF
f _T	Transition frequency	I _C =10mA ; V _{CE} =30V	50	80		MHz

◆ h_{FE} classifications

M	L	K
40-80	60-120	100-200

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PACKAGE OUTLINE

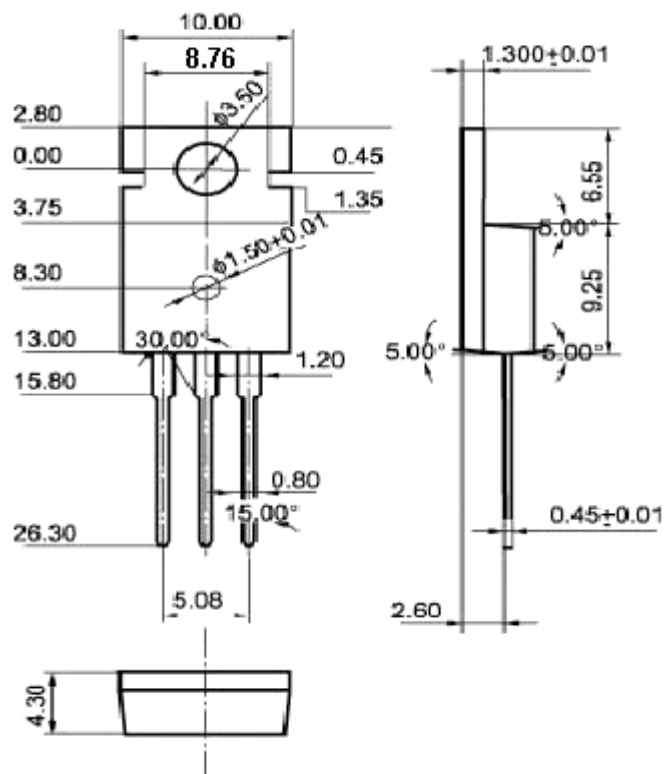


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)