

**Silicon NPN Power Transistors**

**2SC1507**

**DESCRIPTION**

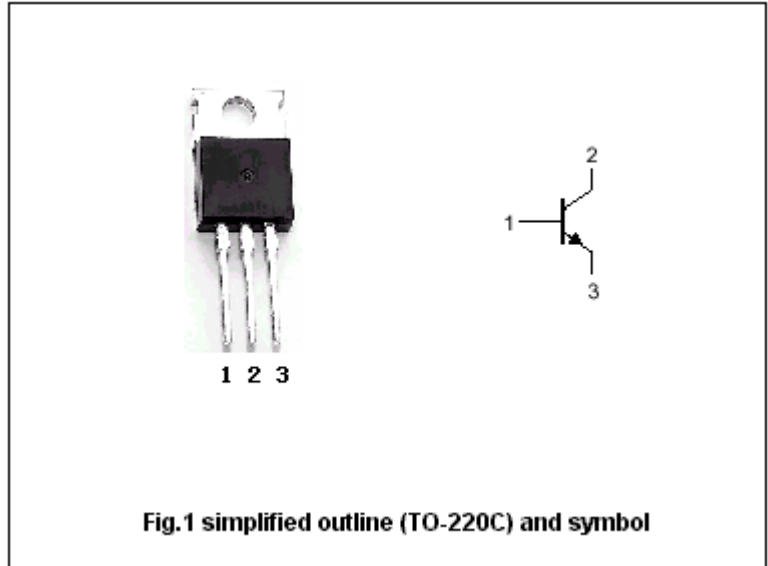
- With TO-220 package
- High collector-emitter voltage  
:  $V_{CEO}=300V$
- High frequency: $f_T=40MHz$ (Min)

**APPLICATIONS**

- For color TV chroma output applications

**PINNING**

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



**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<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CBO(BR)</sub>	Collector-base breakdown voltage	I <sub>C</sub> =10 μA ; I <sub>E</sub> =0	300			V
V <sub>CEO(BR)</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA ; I <sub>B</sub> =0	300			V
V <sub>EBO(BR)</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10 μA ; I <sub>C</sub> =0	7			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =50mA ; I <sub>B</sub> =5mA			2.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =200V ; I <sub>E</sub> =0			100	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7V ; I <sub>C</sub> =0			100	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =10mA ; V <sub>CE</sub> =10V	40		240	
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0 ; V <sub>CB</sub> =50V ; f=1MHz		4		pF
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =10mA ; V <sub>CE</sub> =30V	40	80		MHz

◆ h<sub>FE-1</sub> classifications

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

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PACKAGE OUTLINE

