

Silicon NPN Power Transistors

2SC1507

DESCRIPTION

- With TO-220F 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

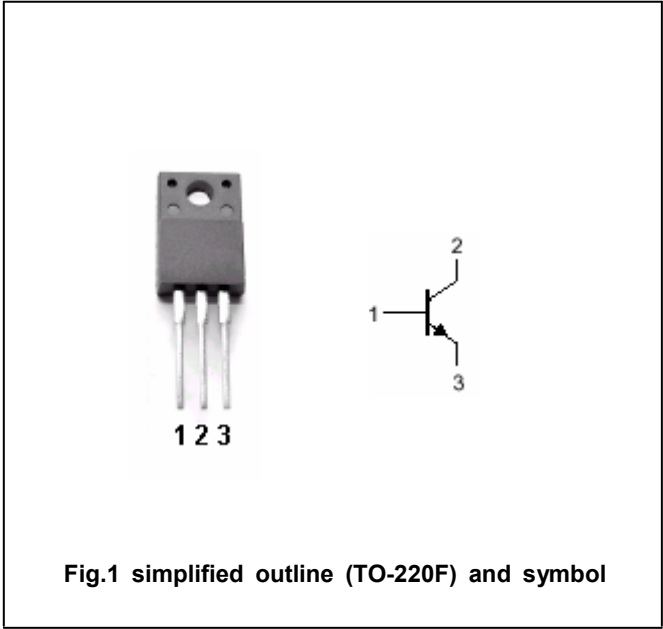


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings ($T_a=25^{\circ}C$)

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	$^{\circ}C$
T_{stg}	Storage temperature		-55~150	$^{\circ}C$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\mu A$; $I_E=0$	300			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA$; $I_B=0$	300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A$; $I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=50mA$; $I_B=5mA$			2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=200V$; $I_E=0$			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

