

Silicon NPN Power Transistors

2SC1667

DESCRIPTION

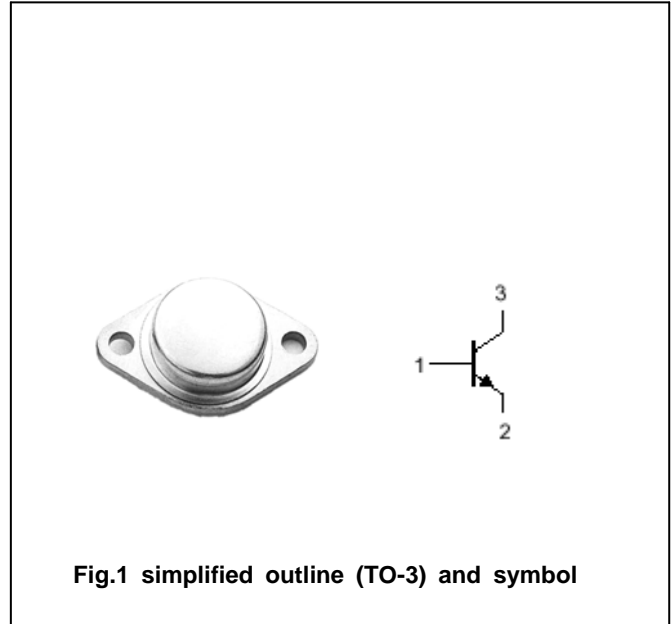
- With TO-3 package
- Low collector saturation voltage
- Excellent safe operating area

APPLICATIONS

- For use in high power audio amplifier applications and high voltage switching regulator circuits

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Absolute maximum ratings(Ta=°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	90	V
V _{CEO}	Collector-emitter voltage	Open base	90	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		4	A
P _D	Total Power Dissipation	T _C =75°C	50	W
T _j	Junction temperature		175	°C
T _{stg}	Storage temperature		-55~175	°C

Silicon NPN Power Transistors**2SC1667****CHARACTERISTICS** $T_j=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=50\text{mA}; I_B=0$	90			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=3\text{A}; I_B=0.3\text{A}$			1.0	V
$V_{BE sat}$	Base-emitter saturation voltage	$I_C=3\text{A}; I_B=0.3\text{A}$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=90\text{V}; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7\text{V}; I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=1\text{A}; V_{CE}=4\text{V}$	40		200	
f_T	Transition frequency	$I_C=0.5\text{A}; V_{CE}=10\text{V}$		10		MHz

PACKAGE OUTLINE

