

Silicon PNP Power Transistors

2SA1694

DESCRIPTION

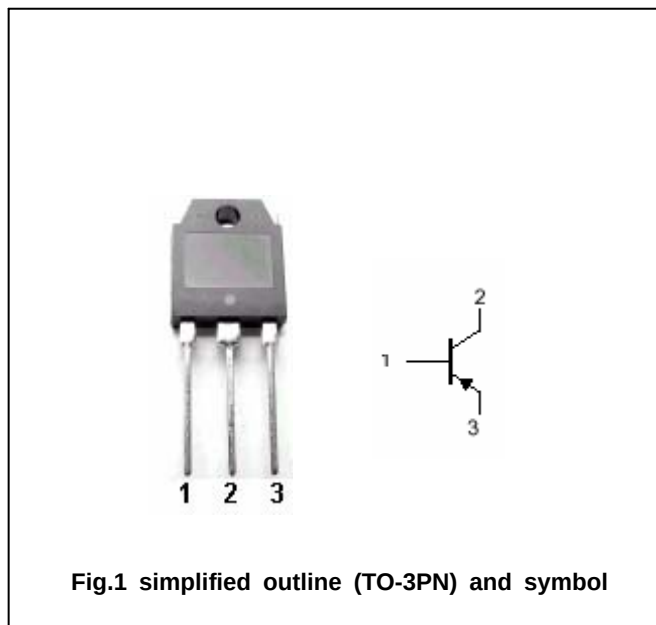
- With TO-3PN package
- Complement to type 2SC4467

APPLICATIONS

- Audio and general purpose

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector-emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-8	A
I_B	Base current		-3	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	80	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -50\text{mA}$; $I_B = 0$	-120			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -3\text{A}$; $I_B = -0.3\text{A}$			-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -120\text{V}$; $I_E = 0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -6\text{V}$; $I_C = 0$			-10	μA
h_{FE}	DC current gain	$I_C = -3\text{A}$; $V_{CE} = -4\text{V}$	50		180	
C_{OB}	Output capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$, $f = 1\text{MHz}$		300		pF
f_T	Transition frequency	$I_C = -0.5\text{A}$; $V_{CE} = -12\text{V}$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C = -4\text{A}$; $R_L = 10\Omega$ $I_{B1} = -I_{B2} = -0.4\text{A}$ $V_{CC} = -40\text{V}$		0.14		μs
t_s	Storage time			1.40		μs
t_f	Fall time			0.21		μs

◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180

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[illegible]

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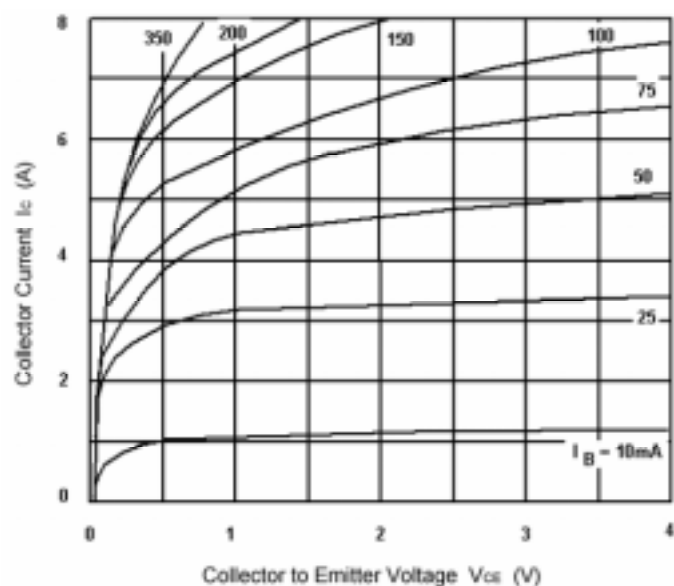


Fig.3 Static Characteristic

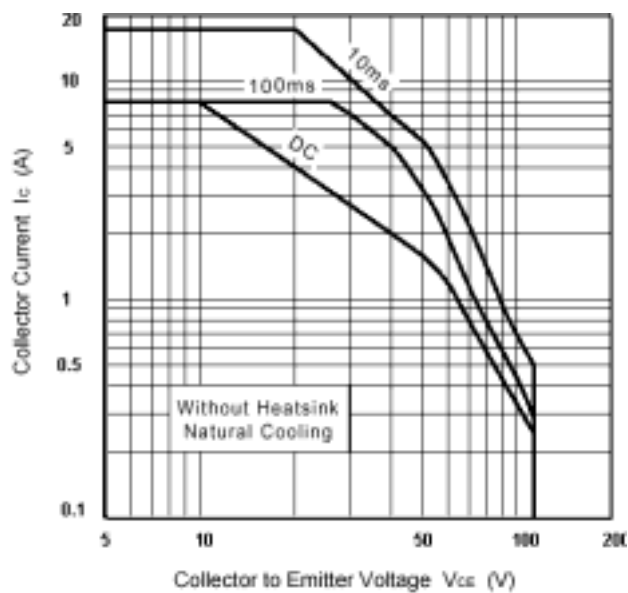


Fig.4 Safe Operating Area

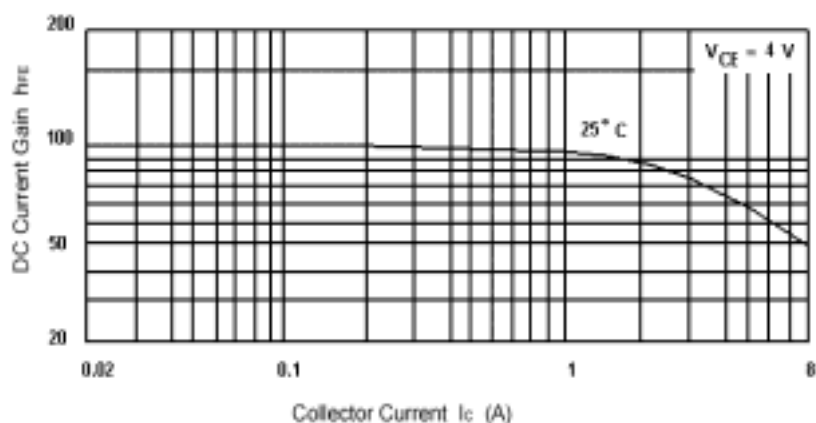


Fig.5 DC current Gain