

## Silicon PNP Power Transistors

2SA1116

**DESCRIPTION**

- With TO-3 package
- Complement to type 2SC2607

**APPLICATIONS**

- For power switching amplifier and general purpose applications

**PINNING(see Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

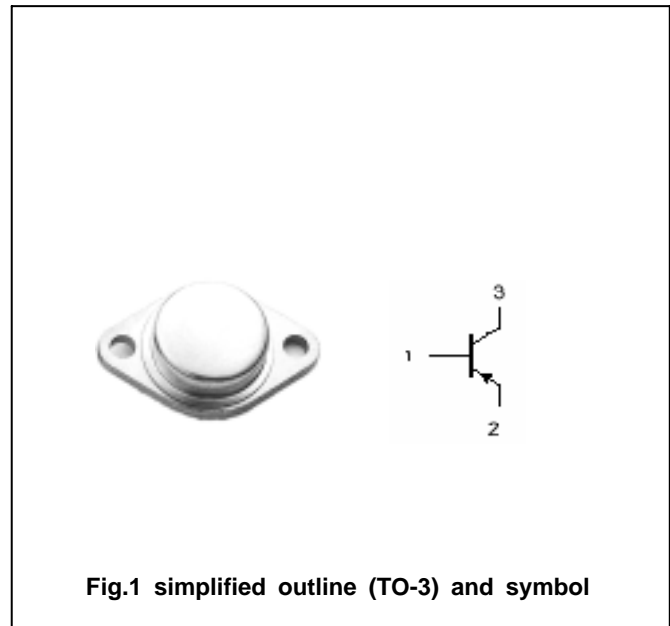


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta= )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-200	V
$V_{CEO}$	Collector-emitter voltage	Open base	-200	V
$V_{EBO}$	Emitter-base voltage	Open collector	-6	V
$I_C$	Collector current		-15	A
$I_B$	Base current		-5	A
$P_C$	Collector power dissipation	$T_C=25$	150	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-65~150	

## Silicon PNP Power Transistors

## 2SA1116

## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-50mA ; I <sub>B</sub> =0	-200			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-10A; I <sub>B</sub> =-1A			-3.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-200V; I <sub>E</sub> =0			-0.1	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-6V; I <sub>C</sub> =0			-0.1	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-5A ; V <sub>CE</sub> =-4V	30			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-12V		20		MHz

Switching times resistive load

t <sub>r</sub>	Rise time	I <sub>C</sub> =-5.0A I <sub>B1</sub> =-I <sub>B2</sub> =-0.5A R <sub>L</sub> =12 ; V <sub>CC</sub> =-60V		0.3		μs
t <sub>s</sub>	Storage time			0.9		μs
t <sub>f</sub>	Fall time			0.2		μs

Silicon PNP Power Transistors

2SA1116

PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance: ± 0.1mm)