

**Silicon PNP Power Transistors****2SA1166****DESCRIPTION**

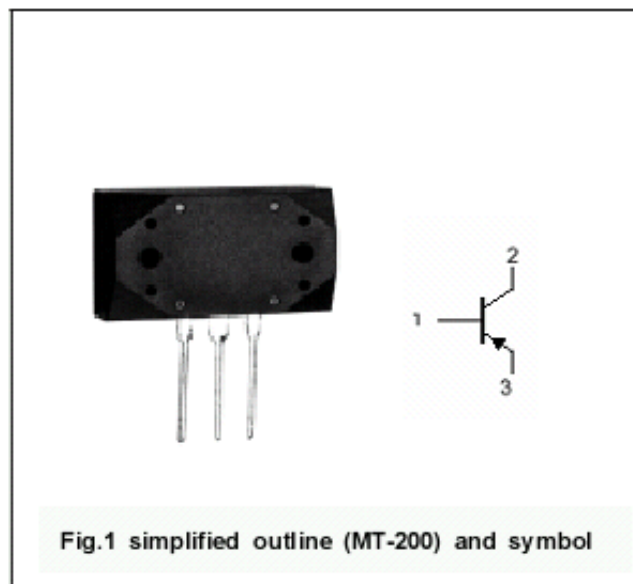
- With MT-200 package
- High power dissipation

APPLICATIONS

- Audio and general purpose applications

PINNING (see Fig.2)

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

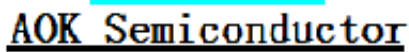
**Absolute maximum ratings(Ta=25℃)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-150	V
V_{CEO}	Collector-emitter voltage	Open base	-150	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	$T_C=25^{\circ}\text{C}$	150	W
T_J	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

**Silicon PNP Power Transistors****2SA1166****CHARACTERISTICS**

$T_j=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-25\text{mA}$; $I_B=0$	-150			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-1\text{mA}$; $I_E=0$	-150			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-1\text{mA}$; $I_C=0$	-6			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-5\text{A}$; $I_B=-0.5\text{A}$			-2.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-5\text{A}$; $I_B=-0.5\text{A}$			-2.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-150\text{V}$; $I_E=0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6\text{V}$; $I_C=0$			-10	μA
h_{FE}	DC current gain	$I_C=-5\text{A}$; $V_{CE}=-4\text{V}$	50			
f_T	Transition frequency	$I_C=-1\text{A}$; $V_{CE}=-10\text{V}$		60		MHz



Technical drawing of a 3-pin electrical plug (Type B) showing front, side, and bottom views with dimensions in millimeters.

Front View Dimensions:

- Overall width: 36.4 ± 0.3
- Distance between pin centers: 24.2 ± 0.2
- Pin diameter: $2 \times \varnothing 3.2 \pm 0.1$
- Pin length: 20.0 MIN
- Pin thickness: 4.0 MAX
- Pin diameter at base: $1.05^{+0.2}_{-0.1}$
- Pin diameter at top: 2
- Pin diameter at base (alternative): 3
- Distance from pin center to side edge: 5.45 ± 0.1
- Pin diameter at base (alternative): $1.05^{+0.2}_{-0.1}$

Side View Dimensions:

- Overall height: 6.0 ± 0.2
- Distance from top edge to pin base: 2.1
- Pin diameter at base: $0.65^{+0.2}_{-0.1}$
- Distance from pin center to side edge: $3.0^{+0.3}_{-0.1}$

Bottom View:

- Shows the base of the plug with three mounting holes.

Fig.2 outline dimensions