

Silicon PNP Power Transistors

2SA1102

DESCRIPTION

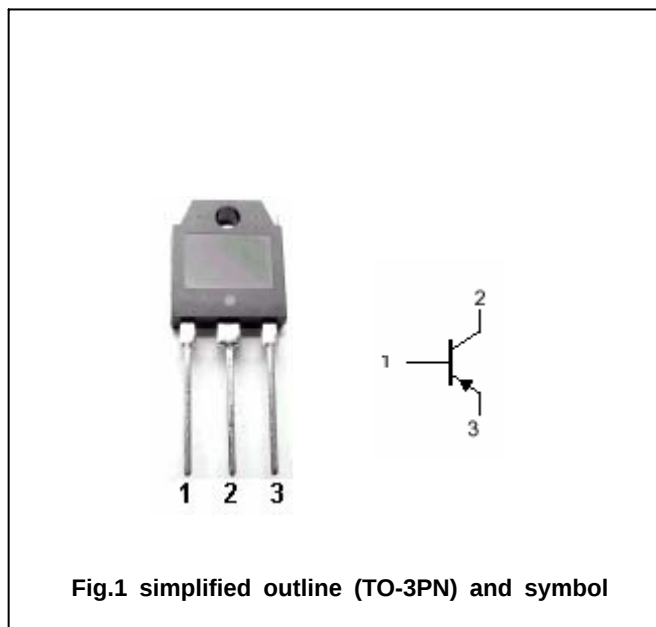
- With TO-3PN package
- Complement to type 2SC2577
- High current capability
- High power dissipation

APPLICATIONS

- Audio power amplifier applications
- DC-DC converters

PINNING

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

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-6	A
P_C	Collector power dissipation	$T_C = 25$	60	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-25mA ; I _B =0	-80			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-1.8	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V; I _E =0			-100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-6V; I _C =0			-100	μ A
h _{FE}	DC current gain	I _C =-2A ; V _{CE} =4V	50			
f _T	Transition frequency	I _E =1A ; V _{CE} =-12V		20		MHz

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Technical drawing of a mechanical part showing front, side, and top views with dimensions.

Front View Dimensions:

- Overall width: 15.60
- Inner width: 13.50
- Inner width: 10.00
- Inner width: 8.00
- Top edge: 42.60
- Top edge: 40.60
- Top edge: 37.60
- Top edge: 36.60
- Top edge: 35.60
- Top edge: 26.80
- Top edge: 25.00
- Top edge: 22.60
- Top edge: 21.10
- Top edge: 19.30
- Bottom edge: 3.25
- Bottom edge: 2.00
- Bottom edge: 0.00
- Bottom edge: 2.00
- Bottom edge: 0.60
- Top hole diameter: $30\text{-}\phi 1.50$
- Top hole diameter: $10\text{-}\phi 3.50$
- Top hole diameter: $R0.50$
- Bottom hole diameter: $10\text{-}\phi 2.05\text{ }^{0}_{-0.05}$

Side View Dimensions:

- Overall height: 40.10
- Top edge: 4.80
- Top edge: 2.00 ± 0.005
- Top edge: 3.00B
- Top edge: 17.00
- Top edge: 7.00
- Top edge: 13.50
- Top edge: 3.00
- Top edge: 2.00
- Top edge: 1.00
- Top edge: 0.60 ± 0.005
- Top edge: $3.40\text{ }^{+0.05}_{0}$
- Top edge: 10.90 ± 0.01

Top View Dimensions:

- Overall width: 15.60
- Inner width: 13.50
- Inner width: 10.00
- Inner width: 8.00
- Top edge: 42.60
- Top edge: 40.60
- Top edge: 37.60
- Top edge: 36.60
- Top edge: 35.60
- Top edge: 26.80
- Top edge: 25.00
- Top edge: 22.60
- Top edge: 21.10
- Top edge: 19.30
- Bottom edge: 3.25
- Bottom edge: 2.00
- Bottom edge: 0.00
- Bottom edge: 2.00
- Bottom edge: 0.60
- Top hole diameter: $30\text{-}\phi 1.50$
- Top hole diameter: $10\text{-}\phi 3.50$
- Top hole diameter: $R0.50$
- Bottom hole diameter: $10\text{-}\phi 2.05\text{ }^{0}_{-0.05}$