

Silicon PNP Power Transistors

2SA957 2SA958

DESCRIPTION

- With TO-220 package
- High breakdown voltage
- High power dissipation

APPLICATIONS

- For general purpose applications

PINNING

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

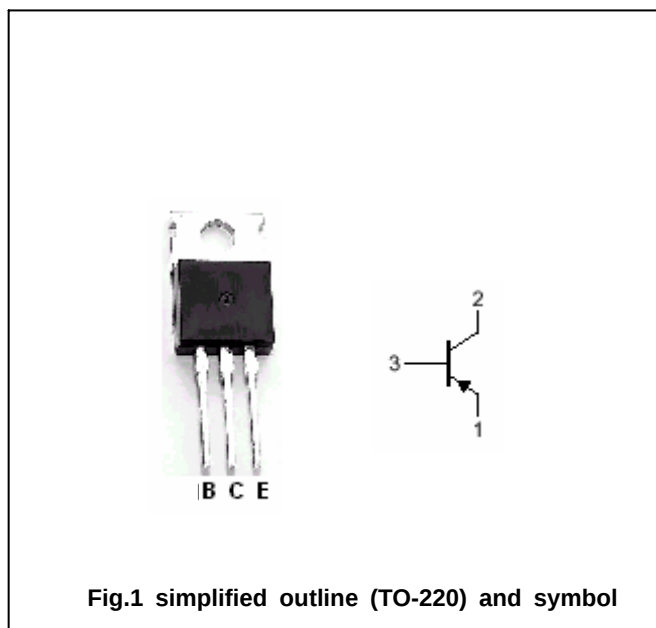


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SA957	Open emitter	-150	V
		2SA958		-200	
V_{CEO}	Collector-emitter voltage	2SA957	Open base	-150	V
		2SA958		-200	
V_{EBO}	Emitter-base voltage		Open collector	-6	V
I_C	Collector current			-2.0	A
I_B	Base current			-1.0	A
P_T	Total power dissipation		$T_C=25$	30	W
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-55~150	

Silicon PNP Power Transistors

2SA957 2SA958

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(BR)}	Collector-emitter breakdown voltage	2SA957	I _C =-25mA, I _B =0	-150			V
		2SA958		-200			
V _{CEsat}	Collector-emitter saturation voltage		I _C =-0.7A; I _B =-0.07A			-1.5	V
I _{CBO}	Collector cut-off current	2SA957	V _{CB} =-150V; I _E =0			-100	μA
		2SA958	V _{CB} =-200V; I _E =0				
I _{EBO}	Emitter cut-off current		V _{EB} =-6V; I _C =0			-1.0	mA
h _{FE}	DC current gain		I _C =-0.7A; V _{CE} =-10V	40			
f _T	Transition frequency		I _C =-0.2A; V _{CE} =-12V		20		MHz

Switching times resistive load

t _r	Rise time	I _C =-1.0A I _{B1} =- I _{B2} =-0.1A R _L =20Ω; V _{CC} =-20V		0.4		μs
t _s	Storage time			1.5		μs
t _f	Fall time			0.5		μs

2SA957 2SA958

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

Front View Dimensions:

- Overall width: 10.00
- Top width: 8.76
- Top thickness: 2.80
- Top surface offset: 0.00
- Inner width: 3.50
- Inner surface offset: 0.45
- Inner thickness: 3.75
- Inner surface offset: 1.35
- Inner width: 1.50 ± 0.01
- Inner surface offset: 8.30
- Inner thickness: 13.00
- Inner surface offset: 15.80
- Inner width: 30.00
- Inner surface offset: 1.20
- Inner thickness: 0.80
- Inner surface offset: 15.00
- Inner width: 5.08
- Inner surface offset: 26.30

Side View Dimensions:

- Overall height: 1.300 ± 0.01
- Top thickness: 6.55
- Inner thickness: 5.00
- Inner surface offset: 9.25
- Inner thickness: 5.00
- Inner surface offset: 5.00
- Inner thickness: 0.45 ± 0.01
- Inner surface offset: 2.60

Bottom View Dimensions:

- Overall width: 4.30

Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)