

## 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

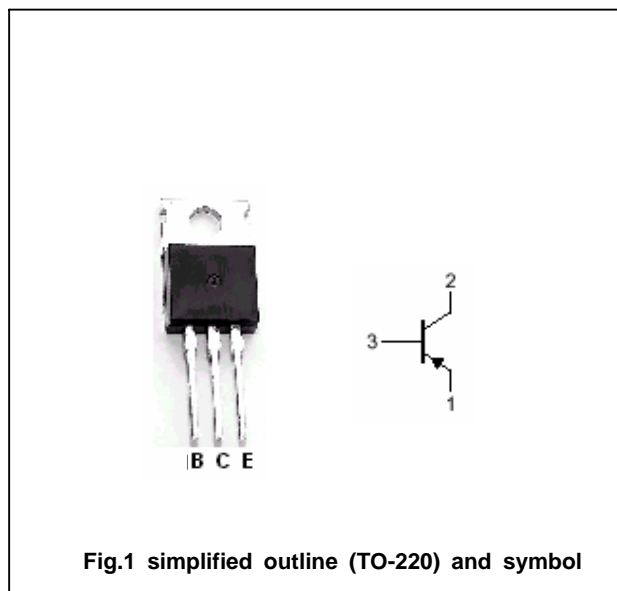


Fig.1 simplified outline (TO-220) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	2SA957	-150	V
		2SA958	-200	
$V_{CEO}$	Collector-emitter voltage	2SA957	-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	$T_C=25^\circ\text{C}$	30	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(BR)</sub>	Collector-emitter breakdown voltage	2SA957	I <sub>C</sub> =-25mA, I <sub>B</sub> =0	-150			V
		2SA958		-200			
V <sub>CEsat</sub>	Collector-emitter saturation voltage		I <sub>C</sub> =-0.7A; I <sub>B</sub> =-0.07A			-1.5	V
I <sub>CBO</sub>	Collector cut-off current	2SA957	V <sub>CB</sub> =-150V; I <sub>E</sub> =0			-100	μA
		2SA958	V <sub>CB</sub> =-200V; I <sub>E</sub> =0				
I <sub>EBO</sub>	Emitter cut-off current		V <sub>EB</sub> =-6V; I <sub>C</sub> =0			-1.0	mA
h <sub>FE</sub>	DC current gain		I <sub>C</sub> =-0.7A; V <sub>CE</sub> =-10V	40			
f <sub>T</sub>	Transition frequency		I <sub>C</sub> =-0.2A; V <sub>CE</sub> =-12V		20		MHz

Switching times resistive load

t <sub>r</sub>	Rise time	I <sub>C</sub> =-1.0A I <sub>B1</sub> =- I <sub>B2</sub> =-0.1A R <sub>L</sub> =20Ω; V <sub>CC</sub> =-20V		0.4		μs
t <sub>s</sub>	Storage time			1.5		μs
t <sub>f</sub>	Fall time			0.5		μs

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PACKAGE OUTLINE

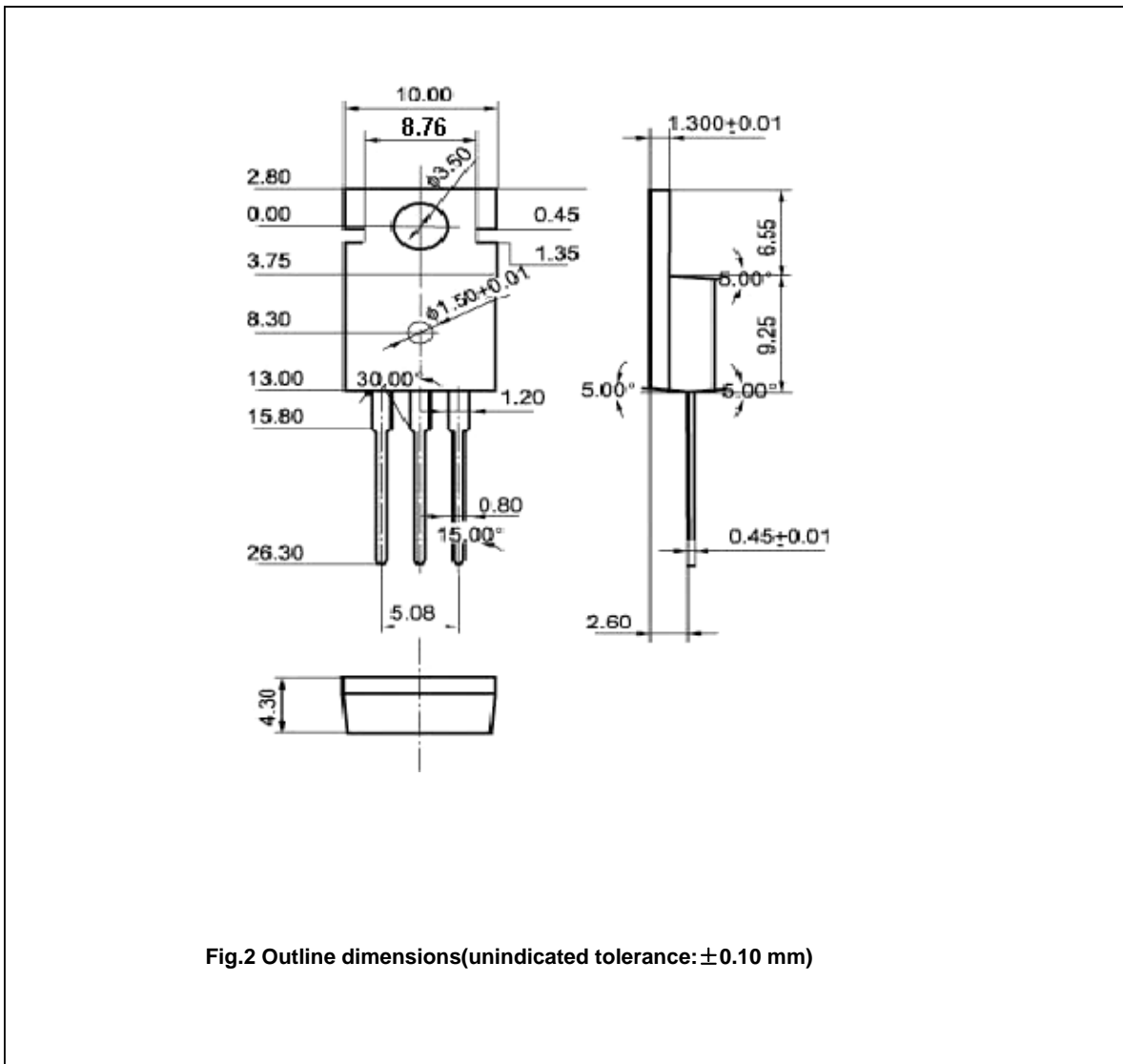


Fig.2 Outline dimensions(unindicated tolerance: ±0.10 mm)