

## Silicon PNP Power Transistors

## MJE2955T

## DESCRIPTION

- With TO-220 package
- Complement to type MJE3055T
- DC current gain  $-h_{FE} = 20-70 @ I_C = -4 \text{ A}$
- Collector-emitter saturation voltage -  
 $V_{CE(sat)} = -1.1 \text{ Vdc (Max) @ } I_C = -4 \text{ A}$

## APPLICATIONS

- Designed for general-purpose switching and amplifier applications.

## PINNING

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

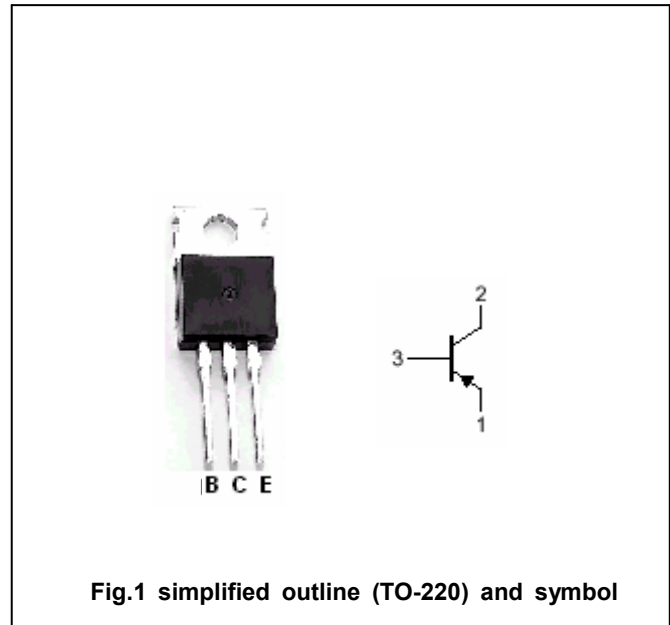


Fig.1 simplified outline (TO-220) and symbol

ABSOLUTE MAXIMUM RATINGS( $T_C=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-70	V
$V_{CEO}$	Collector-emitter voltage	Open base	-60	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current		-10	A
$I_B$	Base current		-6	A
$P_C$	Collector power dissipation	$T_C=25^\circ\text{C}$	75	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.67	$^\circ\text{C/W}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEQ(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-0.2A ; I <sub>B</sub> =0	-60			V
V <sub>CE(sat)-1</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-4A ; I <sub>B</sub> =-0.4A			-1.1	V
V <sub>CE(sat)-2</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-10A ; I <sub>B</sub> =-3.3A			-8.0	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-4V			-1.8	V
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-30V ; I <sub>B</sub> =0			-0.7	mA
I <sub>CEX</sub>	Collector cut-off current	V <sub>CE</sub> =-70V ; V <sub>BE(off)</sub> =-1.5V T <sub>C</sub> =150 °C			-1.0 -5.0	mA
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-70V ; I <sub>E</sub> =0 T <sub>C</sub> =150 °C			-1.0 -10	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V ; I <sub>C</sub> =0			-5.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-4A ; V <sub>CE</sub> =-4V	20		100	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-10A ; V <sub>CE</sub> =-4V	5.0			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-10V	2.0			MHz

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PACKAGE OUTLINE

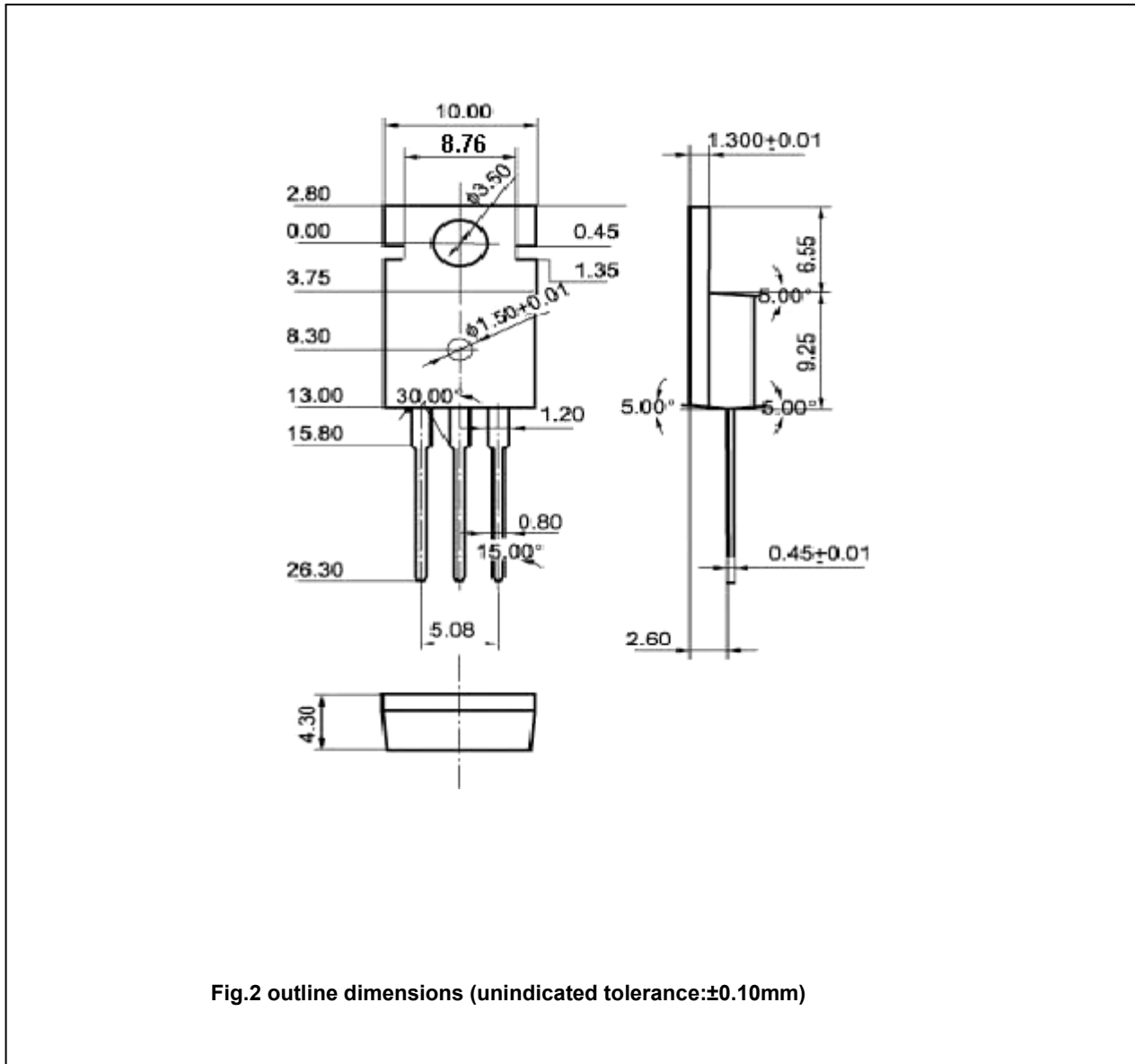


Fig.2 outline dimensions (unindicated tolerance:±0.10mm)