

## Silicon PNP Power Transistors

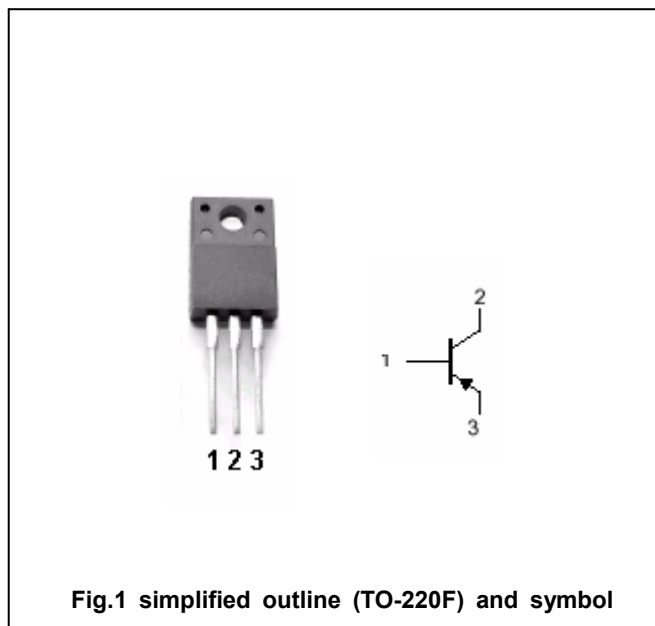
2SB1565

## DESCRIPTION

- With TO-220F package
- Excellent DC current gain characteristics
- Low collector saturation voltage
- Wide SOA (safe operating area)
- Complement to type 2SD2394

## PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-80	V
$V_{CEO}$	Collector-emitter voltage	Open base	-60	V
$V_{EBO}$	Emitter-base voltage	Open collector	-7	V
$I_C$	Collector current		-3	A
$I_{CM}$	Collector current-peak		-6	A
$P_C$	Collector dissipation	$T_a=25^\circ\text{C}$	2	W
		$T_C=25^\circ\text{C}$	25	
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1\text{mA}$ ; $I_B = 0$	-60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -50\mu\text{A}$ ; $I_E = 0$	-80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -50\mu\text{A}$ ; $I_C = 0$	-7			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C = -2\text{A}$ ; $I_B = -0.2\text{A}$			-1.5	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C = -2\text{A}$ ; $I_B = -0.2\text{A}$			-1.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB} = -60\text{V}$ ; $I_E = 0$			-10	$\mu\text{A}$
$I_{EBO}$	Emitter cut-off current	$V_{EB} = -7\text{V}$ ; $I_C = 0$			-10	$\mu\text{A}$
$h_{FE}$	DC current gain	$I_C = -0.5\text{A}$ ; $V_{CE} = -5\text{V}$	100		320	
$C_{OB}$	Output capacitance	$I_E = 0$ ; $V_{CB} = -10\text{V}$ ; $f = 1\text{MHz}$		50		pF
$f_T$	Transition frequency	$I_C = -0.5\text{A}$ ; $V_{CE} = -5\text{V}$		15		MHz

◆  $h_{FE}$  Classifications

E	F
100-200	160-320

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PACKAGE OUTLINE

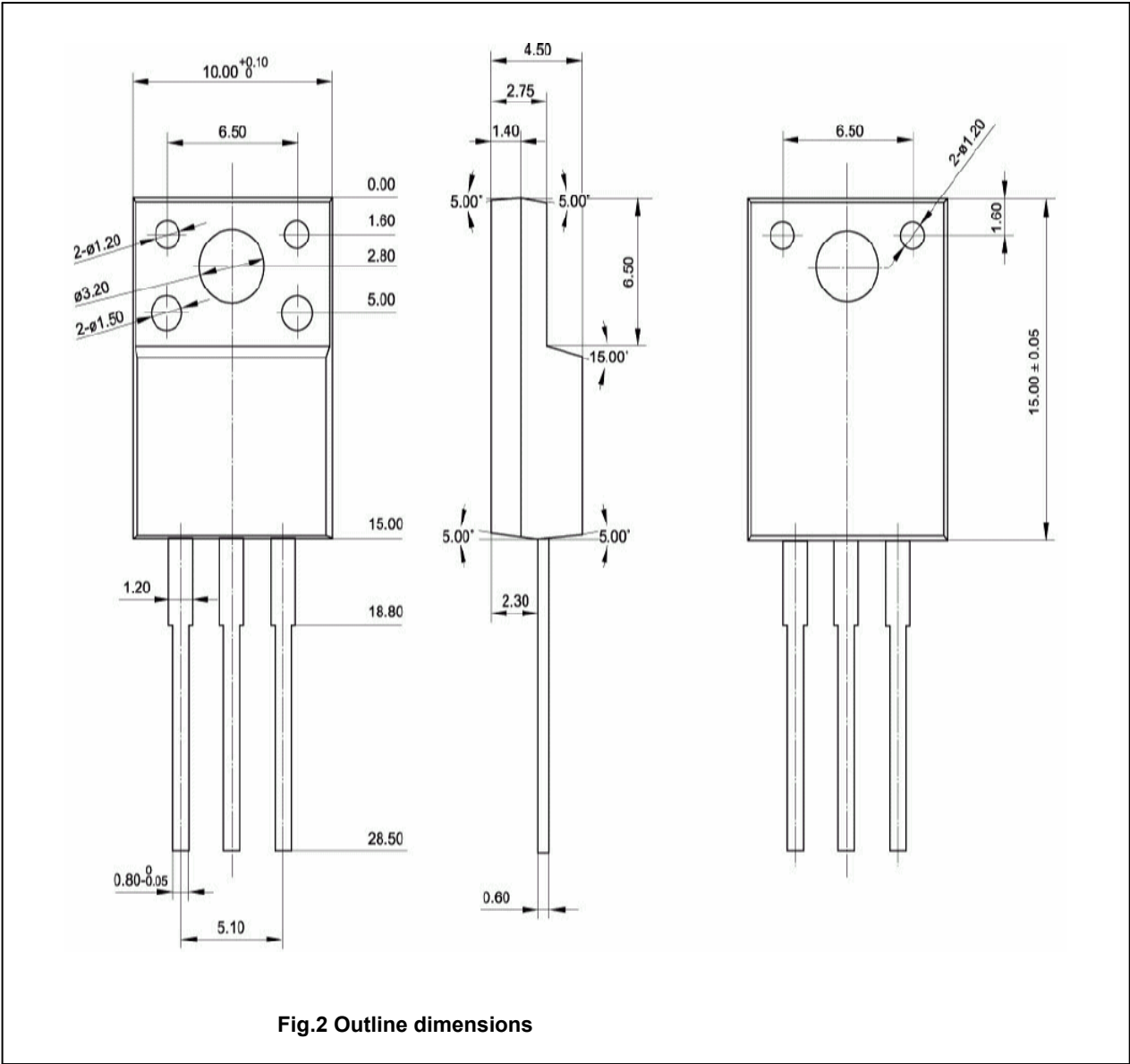


Fig.2 Outline dimensions