

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

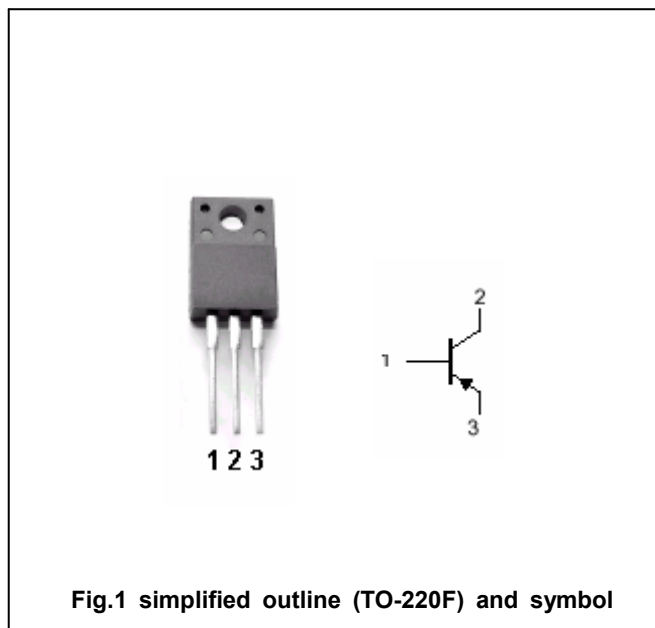


Fig.1 simplified outline (TO-220F) and symbol

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	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -7\text{V}$; $I_C = 0$			-10	μA
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

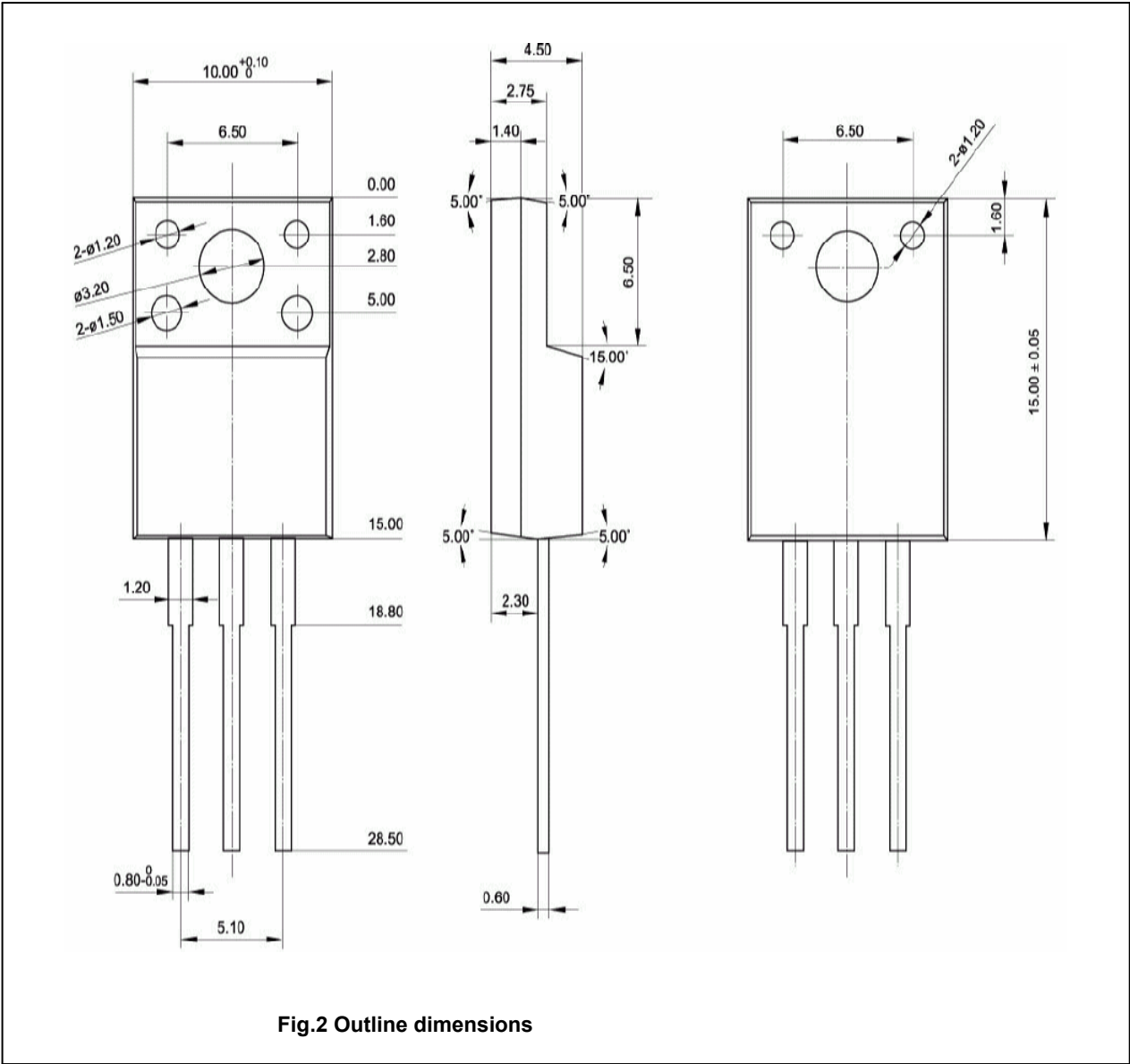


Fig.2 Outline dimensions