

Silicon PNP Power Transistors

2SB1607

DESCRIPTION

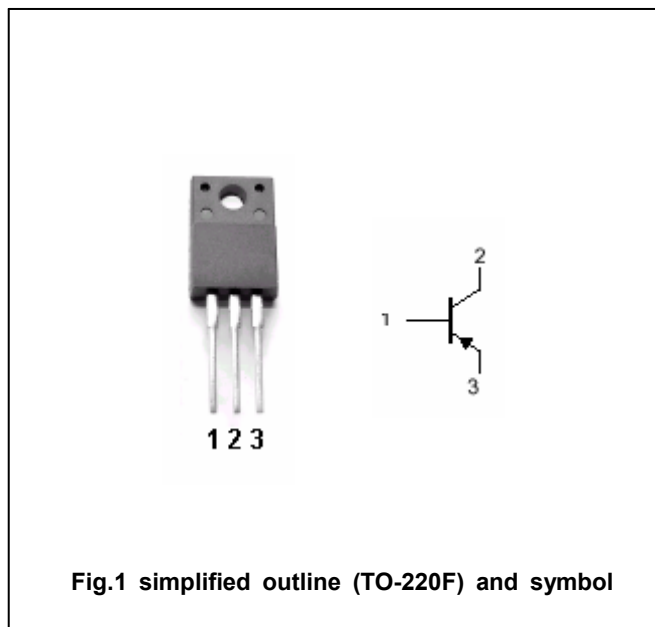
- With TO-220F package
- Large collector current I_C
- Low collector saturation voltage.
- Complement to type 2SD2469

APPLICATIONS

- For power switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-130	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-7	A
I_{CM}	Collector current-peak		-15	A
P_C	Collector dissipation	$T_C=25^\circ\text{C}$	40	W
		$T_a=25^\circ\text{C}$	2	
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	$I_C = -10mA$; $I_B = 0$	-80			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -5A$; $I_B = -0.25A$			-0.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = -5A$; $I_B = -0.25A$			-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -100V$; $I_E = 0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V$; $I_C = 0$			-50	μA
h_{FE-1}	DC current gain	$I_C = -0.1A$; $V_{CE} = -2V$	45			
h_{FE-2}	DC current gain	$I_C = -3A$; $V_{CE} = -2V$	90		260	
f_T	Transition frequency	$I_C = -0.5A$; $V_{CE} = -10V$; $f = 10MHz$		30		MHz

Switching times

t_{on}	Turn-on time	$I_C = -3A$; $I_{B1} = -I_{B2} = -0.3A$		0.5		μs
t_{stg}	Storage time			1.5		μs
t_f	Fall time			0.1		μs

◆ h_{FE-2} classifications

Q	P
90-180	130-260

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PACKAGE OUTLINE

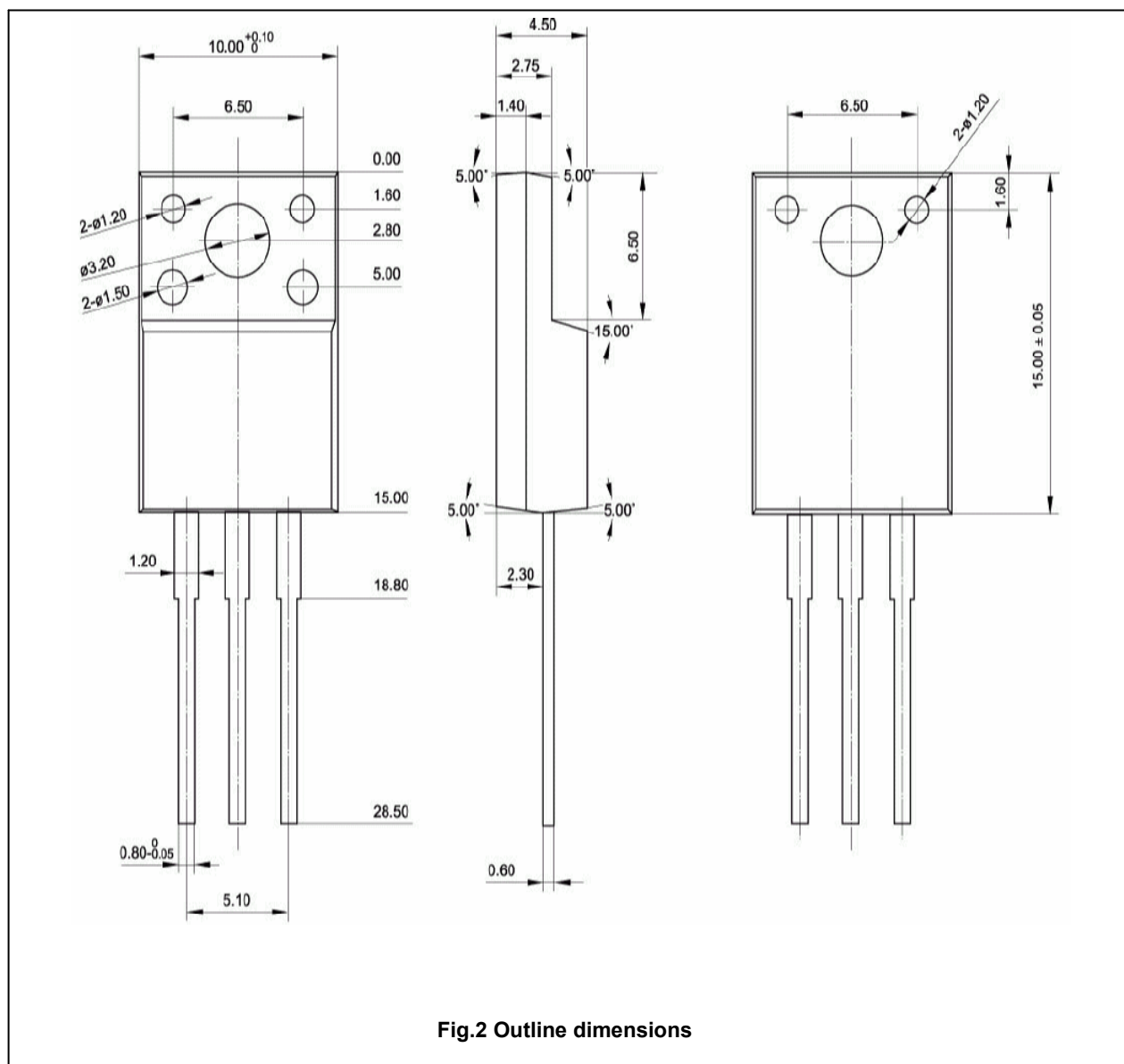


Fig.2 Outline dimensions

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