

Silicon PNP Power Transistors

2SB1548 2SB1548A

DESCRIPTION

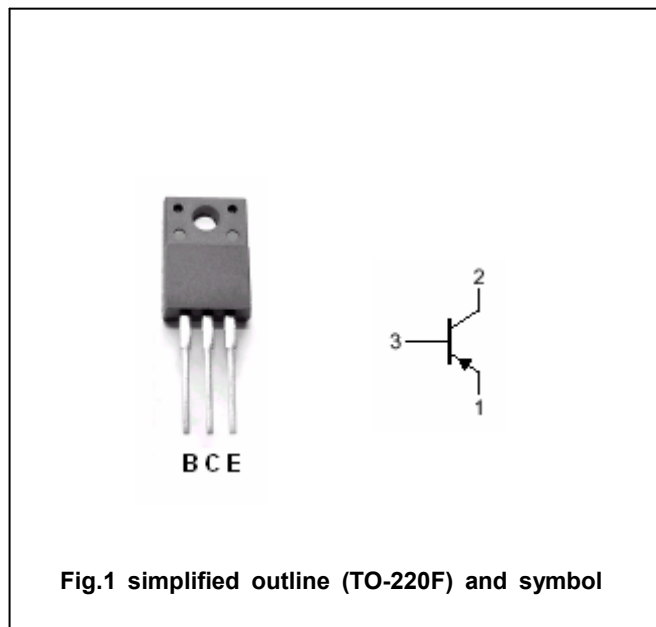
- With TO-220F package
- Complement to type 2SD2374/2374A
- Low collector saturation voltage
- High forward current transfer ratio h_{FE} which has satisfactory linearity

APPLICATIONS

- For power amplifications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

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

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SB1548	Open emitter	-60	V
		2SB1548A		-80	
V_{CEO}	Collector-emitter voltage	2SB1548	Open base	-60	V
		2SB1548A		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-3	A
I_{CM}	Collector current-peak			-5	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℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CE0}	Collector-emitter voltage	2SB1548	$I_C=-30mA; I_B=0$	-60			V
		2SB1548A		-80			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=-3A; I_B=-0.375A$			-1.2	V
V_{BE}	Base-emitter voltage		$I_C=-3A; V_{CE}=-4V$			-1.8	V
I_{CBO}	Collector cut-off current	2SB1548	$V_{CB}=-60V; I_E=0$			-200	μA
		2SB1548A	$V_{CB}=-80V; I_E=0$				
I_{CEO}	Collector cut-off current	2SB1548	$V_{CE}=-30V; I_B=0$			-300	μA
		2SB1548A	$V_{CE}=-60V; I_B=0$				
I_{EBO}	Emitter cut-off current		$V_{EB}=-5V; I_C=0$			-1	mA
h_{FE-1}	DC current gain		$I_C=-1A; V_{CE}=-4V$	70		250	
h_{FE-2}	DC current gain		$I_C=-3A; V_{CE}=-4V$	10			
f_T	Transition frequency		$I_C=-0.5A; V_{CE}=-10V$		30		MHz

Switching times

t_{on}	Turn-on time	$I_C=-1.0A; I_{B1}=-I_{B2}=-0.1A$		0.5		μs
t_s	Storage time			1.2		μs
t_f	Fall time			0.3		μs

◆ h_{FE-1} Classifications

Q	P
70-150	120-250

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PACKAGE OUTLINE

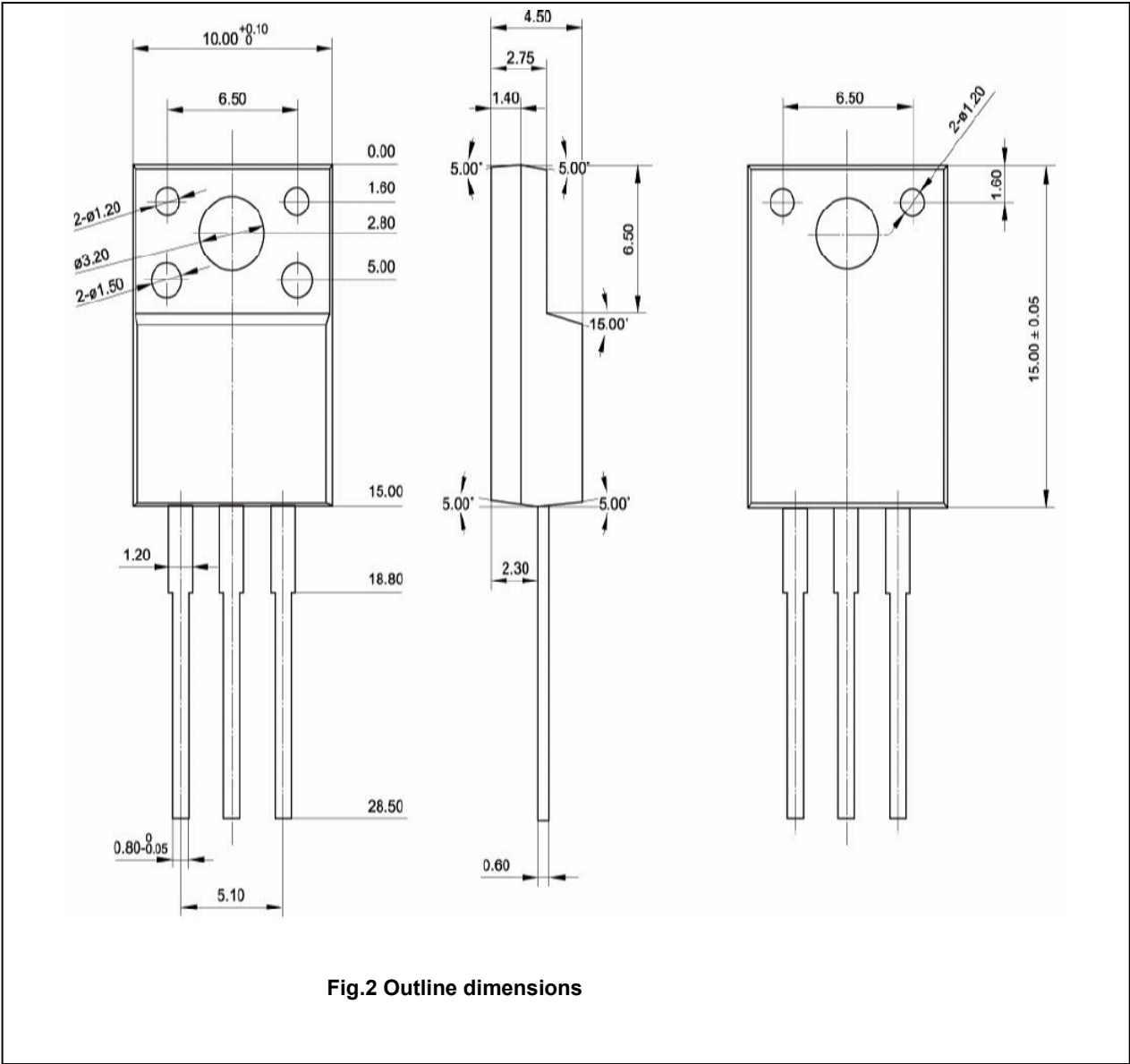


Fig.2 Outline dimensions

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