

Silicon PNP Power Transistors

2SB954 2SB954A

DESCRIPTION

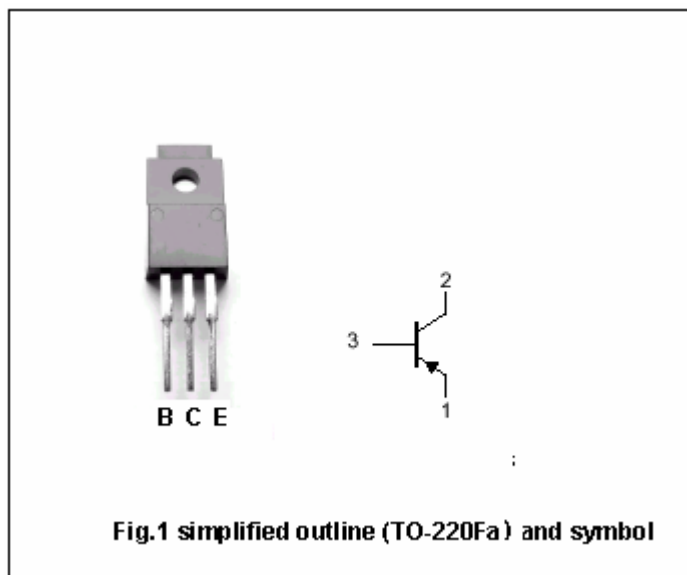
- With TO-220Fa package
- High forward current transfer ratio h_{FE} which has satisfactory linearity
- Low collector saturation voltage

APPLICATIONS

- For power amplification

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	2SB954	Open emitter	-60	V
		2SB954A		-80	
V_{CEO}	Collector-emitter voltage	2SB954	Open base	-60	V
		2SB954A		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-1	A
I_{CM}	Collector current-peak			-2	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$		2	W
		$T_c=25^\circ\text{C}$		30	
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_{CEO}	Collector-emitter voltage	2SB954	$I_C=-30mA ; I_B=0$	-60			V
		2SB954A		-80			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=-1.0A ; I_B=-0.125A$			-1.0	V
V_{BE}	Base-emitter voltage		$I_C=-1A ; V_{CE}=-4V$			-1.3	V
I_{CEO}	Collector cut-off current	2SB954	$V_{CE}=-30V; I_B=0$			-300	μA
		2SB954A	$V_{CE}=-60V; I_B=0$				
I_{CES}	Collector cut-off current	2SB954	$V_{CE}=-60V; V_{BE}=0$			-200	μA
		2SB954A	$V_{CE}=-80V; V_{BE}=0$				
I_{EBO}	Emitter cut-off current		$V_{EB}=-5V; I_C=0$			-1	mA
h_{FE-1}	DC current gain		$I_C=-0.2A ; V_{CE}=-4V$	70		250	
h_{FE-2}	DC current gain		$I_C=-1A ; V_{CE}=-4V$	15			
f_T	Transition frequency		$I_C=-0.2A; V_{CE}=-5V,f=10MHz$		30		MHz
t_{on}	Trun-on time		$I_C=-1A ; V_{CC}=-50V$ $I_{B1}=-0.1A, I_{B2}=0.1A$		0.5		μs
t_s	Storage time				1.2		μs
t_f	Fall time				0.3		μs

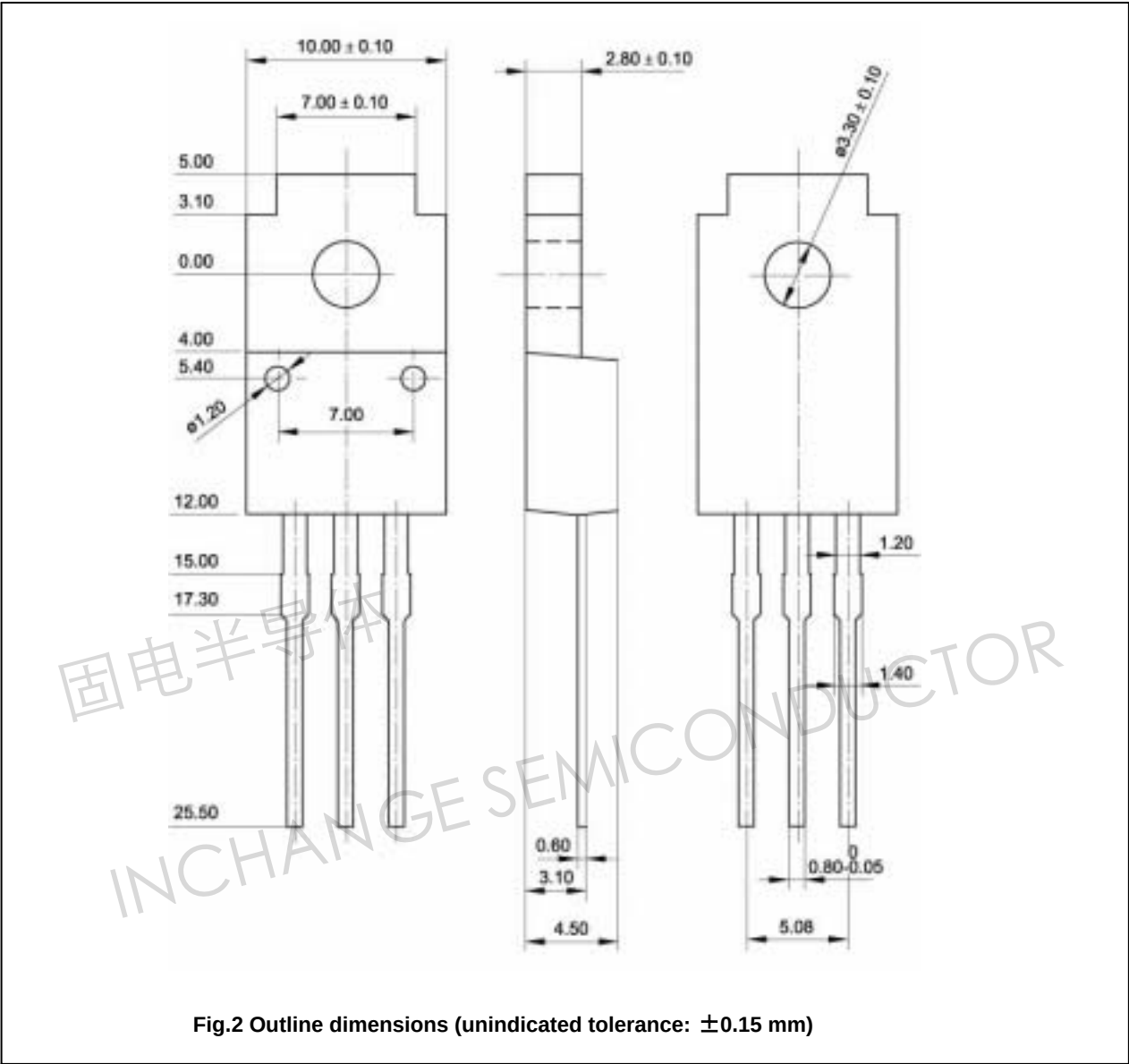
◆ h_{FE-1} Classifications

Q	P
70-150	120-250

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PACKAGE OUTLINE



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