

Silicon PNP Power Transistors

2SB940,2SB940A

DESCRIPTION

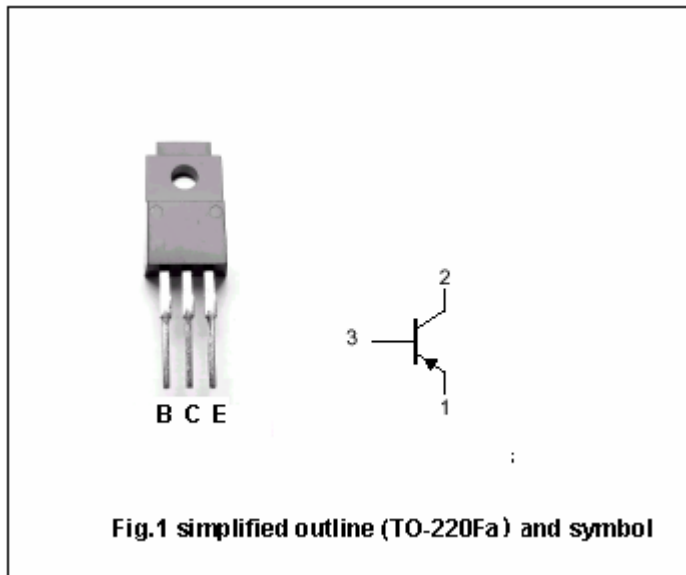
- With TO-220Fa package
- Complement to type 2SD1264/1264A
- High collector to emitter voltage V_{CEO}
- Large collector power dissipation P_C

APPLICATIONS

- For power amplification
- For TV vertical deflection output

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

Absolute maximum ratings($T_a=25^\circ$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V_{CBO}	Collector-base voltage	2SB940	Open emitter	-200	V
		2SB940A		-200	
V_{CEO}	Collector-emitter voltage	2SB940	Open base	-150	V
		2SB940A		-180	
V_{EBO}	Emitter-base voltage	Open collector	-6	V	
I_C	Collector current		-2	A	
I_{CM}	Collector current-peak		-3	A	
P_C	Collector power dissipation	$T_a=25^\circ$	2	W	
		$T_C=25^\circ$	30		
T_j	Junction temperature		150	$^\circ$	
T_{stg}	Storage temperature		-55~150	$^\circ$	

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SB940	I _C =-5mA, I _B =0	-150			V
		2SB940A		-180			
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-50μA, I _E =0	-200			V	
V _{(BR)EBO}	Emitter-base breakdown voltage	I _C =-500μA, I _C =0	-6			V	
V _{CEsat}	Collector-emitter saturation voltage	I _C =-0.5A, I _B =-50mA			-1.0	V	
V _{BE}	Base-emitter voltage	I _C =-0.4A; V _{CE} =-10V			-1.0	V	
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-50	μA	
I _{CBO}	Collector cut-off current	V _{CB} =-200V; I _E =0			-50	μA	
h _{FE-1}	DC current gain	I _C =-0.15A; V _{CE} =-10V	60		240		
h _{FE-2}	DC current gain	I _C =-0.4A; V _{CE} =-10V	50				
f _T	Transition frequency	I _C =-0.5A; V _{CE} =-10V, f=10MHz		30		MHz	

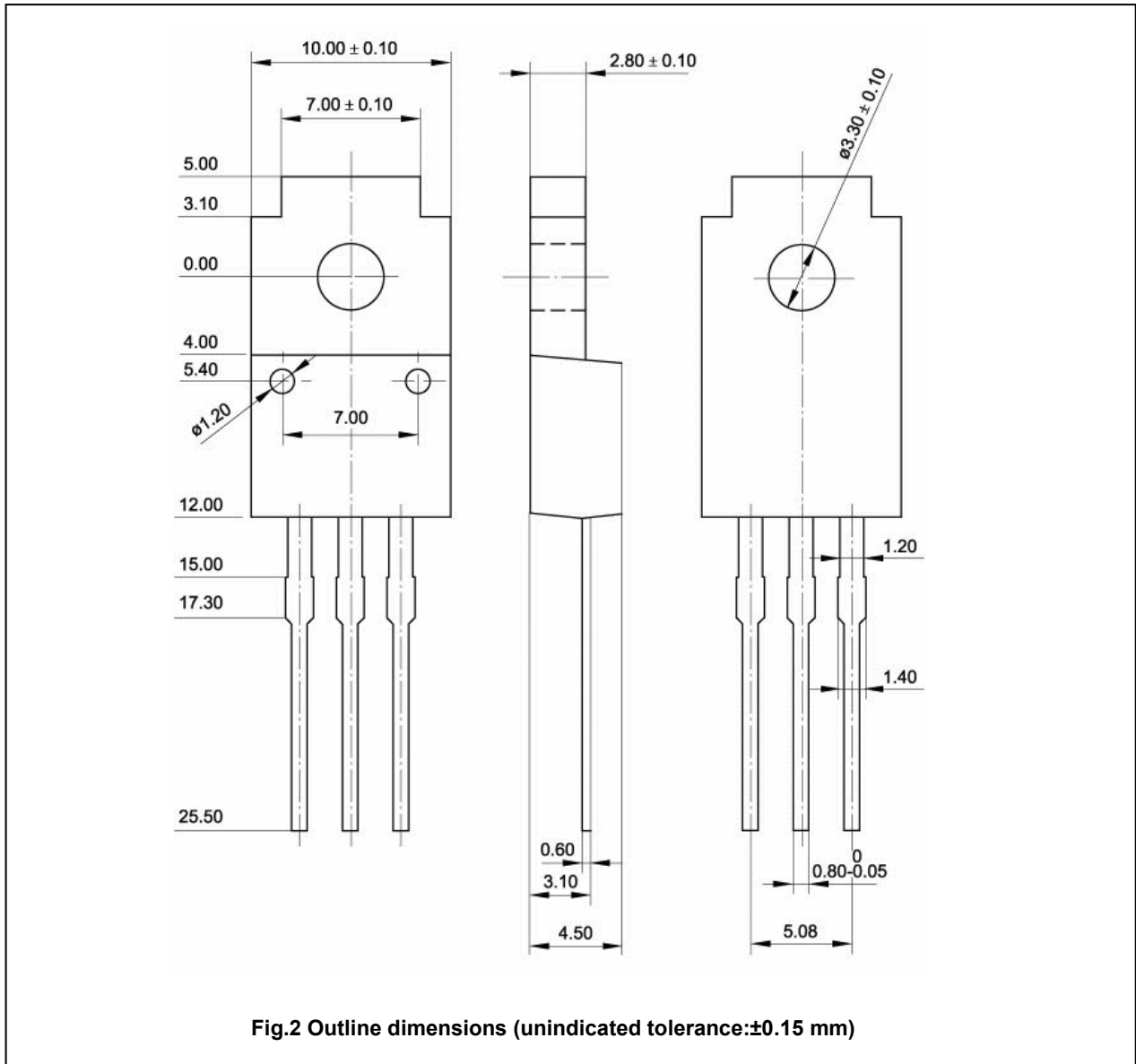
◆ h_{FE-1} Classifications

Q	P
60-140	100-240

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PACKAGE OUTLINE



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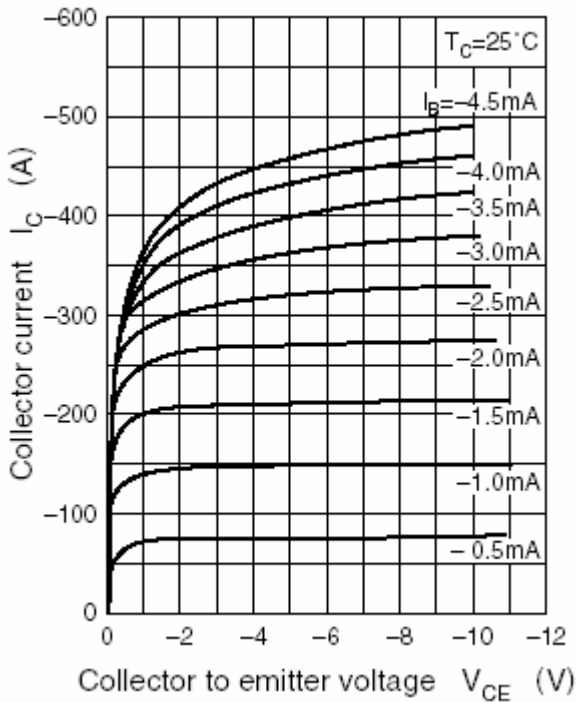


Fig.3 Static Characteristic

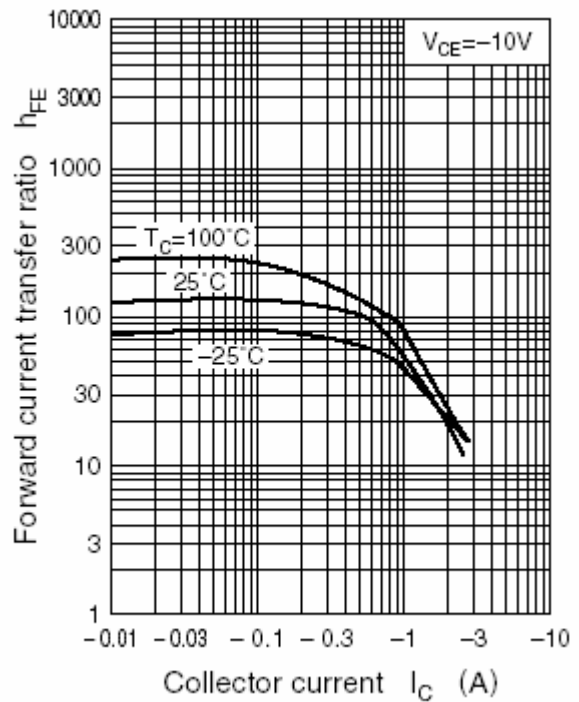


Fig.4 DC current Gain

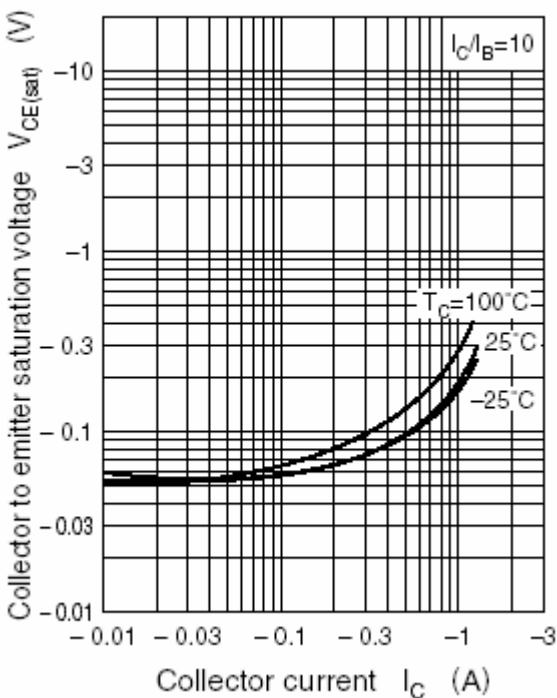


Fig.5 Collector-Emitter Saturation Voltage

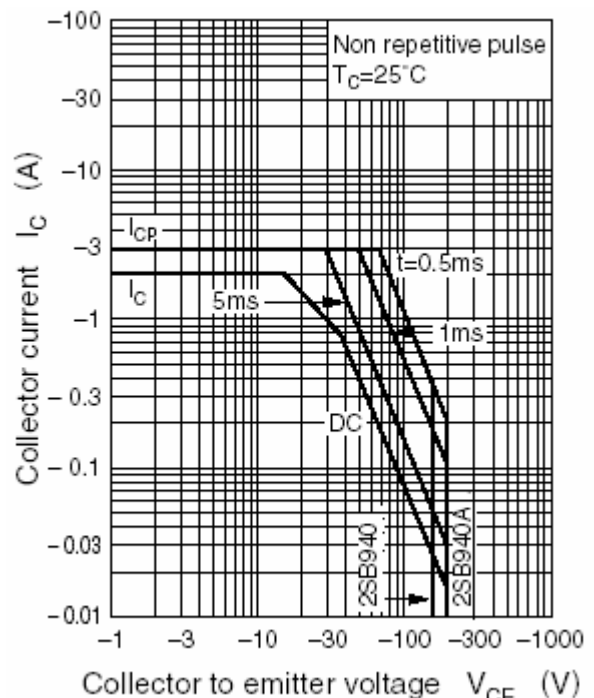


Fig.6 Safe Operating Area