

Silicon PNP Power Transistors

2SB632 2SB632K

DESCRIPTION

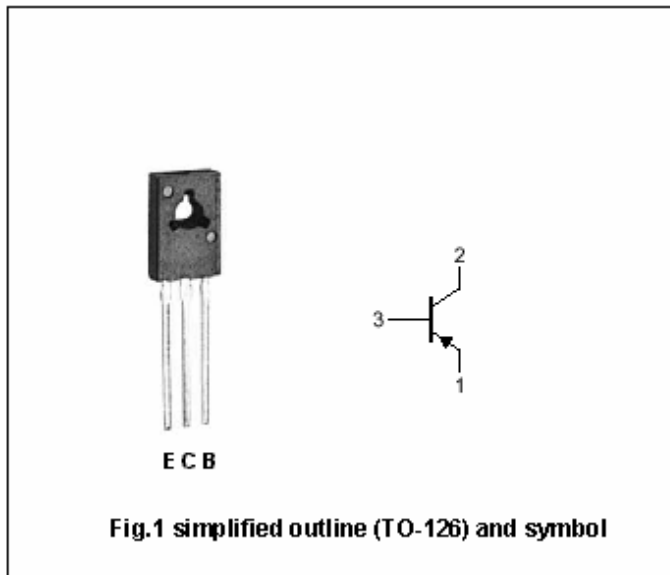
- With TO-126 package
- Complement to type 2SD612/612K
- High collector dissipation
- Wide ASO(Safe Operating Area)

APPLICATIONS

- 25V/35V, 2A low-frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2SB632	-25	V
		2SB632K	-35	
V _{CEO}	Collector-emitter voltage	2SB632	-25	V
		2SB632K	-35	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current (DC)		-2	A
I _{CM}	Collector current-Peak		-3	A
P _D	Total power dissipation	T _a =25°C	1	W
		T _C =25°C	10	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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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	2SB632	I _C =-1mA; R _{BE} =∞	-25			V
		2SB632K		-35			
V _{(BR)CBO}	Collector-base breakdown voltage	2SB632	I _C =-10μA; I _E =0	-25			V
		2SB632K		-35			
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-10μA; I _C =0	-5			V	
V _{CEsat}	Collector-emitter saturation voltage	I _C =-1.5A; I _B =-0.15A		-0.4	-0.9	V	
V _{BEsat}	Base-emitter saturation voltage	I _C =-1.5A; I _B =-0.15A		-1.1	-1.5	V	
I _{CBO}	Collector cut-off current	V _{CB} =-20V; I _E =0			-1	μA	
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-1	μA	
h _{FE-1}	DC current gain	I _C =-0.5A; V _{CE} =-2V	60		320		
h _{FE-2}	DC current gain	I _C =-1.5A; V _{CE} =-2V	30				
f _T	Transition frequency	I _C =-50mA; V _{CE} =-10V		100		MHz	
C _{OB}	Collector output capacitance	f=1MHz; V _{CB} =-10V		45		pF	

Switching times

t _{on}	Turn-on time	I _C =500mA; V _{CE} =12V I _{B1} =-I _{B2} =50mA		0.06		μs
t _f	Fall time			0.08		μs
t _{stg}	Storage time			0.40		μs

◆ h_{FE-1} Classifications

D	E	F
60-120	100-200	160-320

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PACKAGE OUTLINE

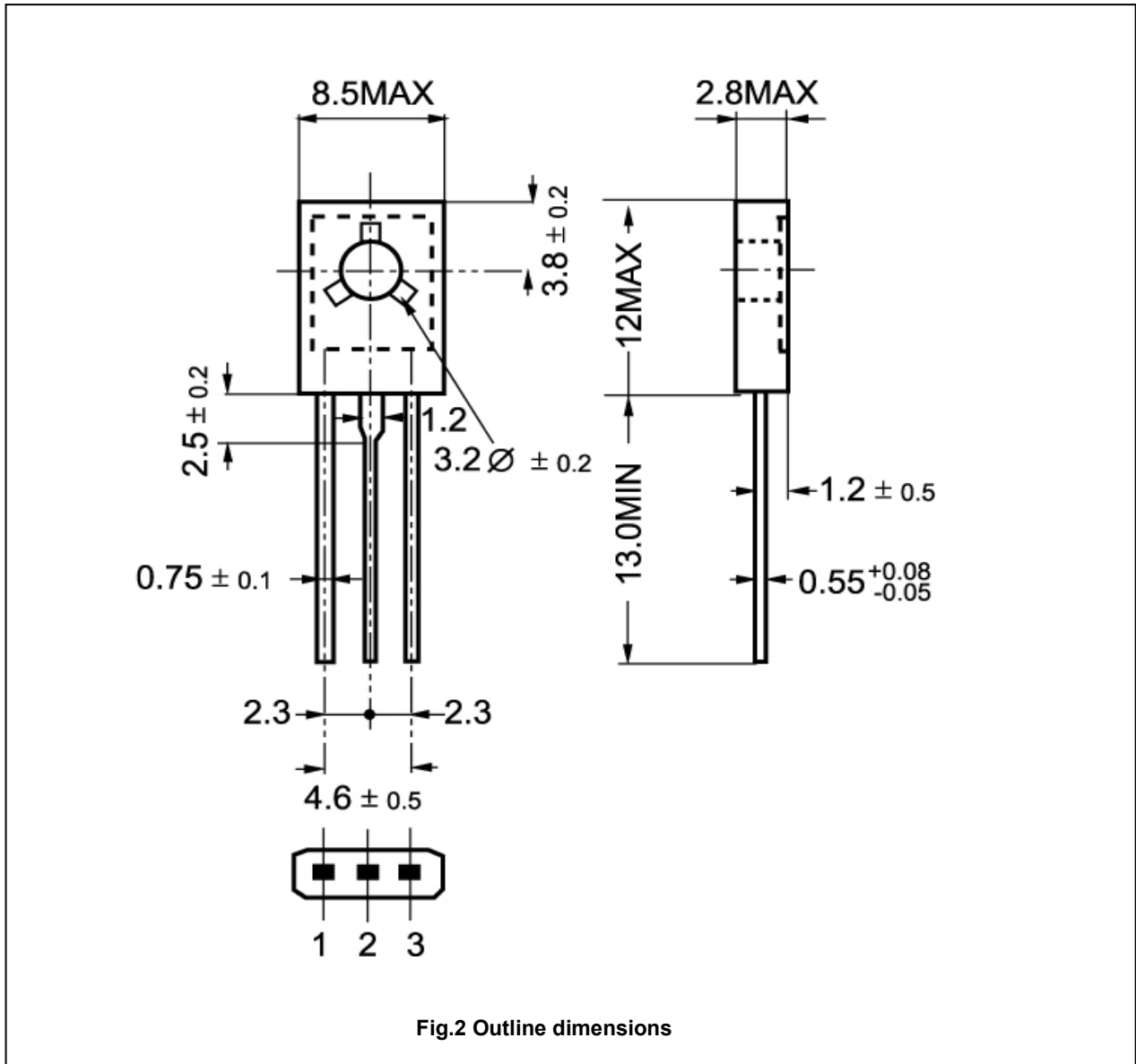


Fig.2 Outline dimensions

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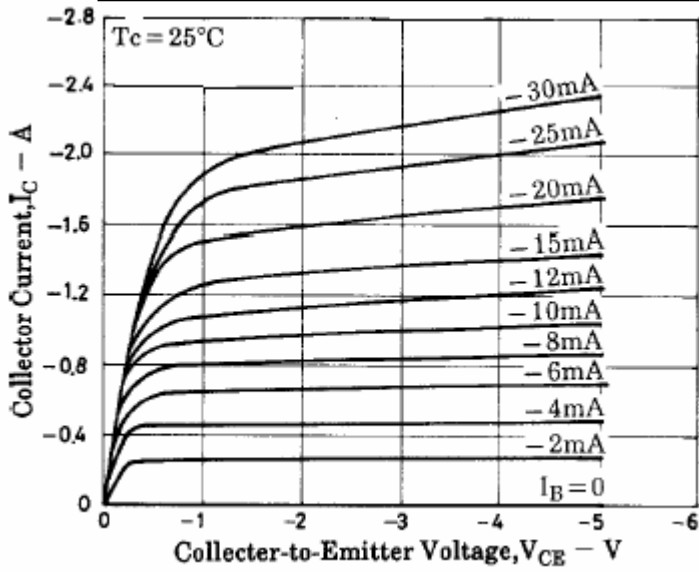


Fig.3 Static Characteristic

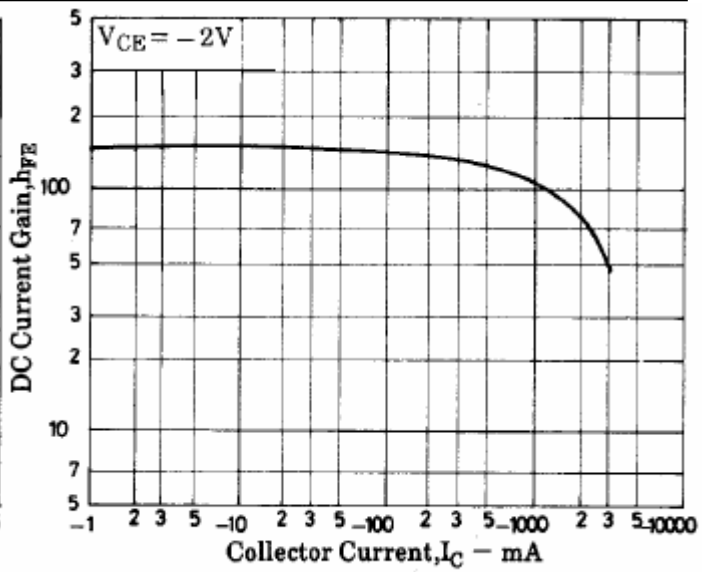


Fig.4 DC current Gain

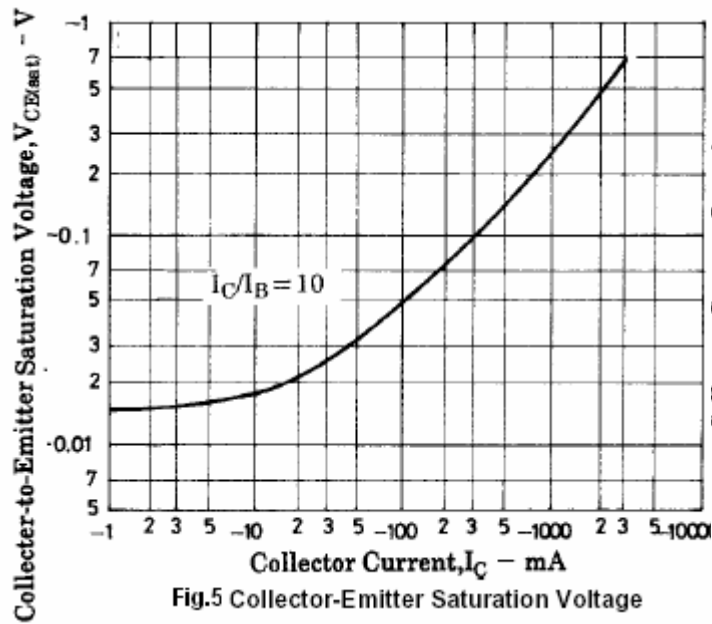


Fig.5 Collector-Emitter Saturation Voltage

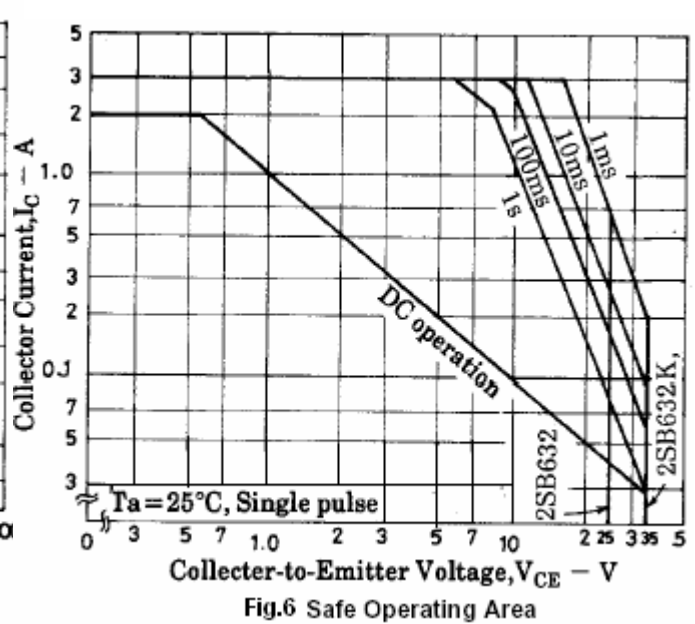


Fig.6 Safe Operating Area