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

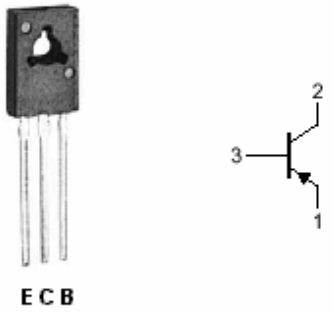

Fig.1 simplified outline (TO-126) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SB632	Open emitter	-25	V
		2SB632K		-35	
V_{CEO}	Collector-emitter voltage	2SB632	Open base	-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□	1	W
			T_C=25□	10	
T_j	Junction temperature			150	□
T_{stg}	Storage temperature			-55~150	□

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CHARACTERISTICS

Tj=25□ 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

PACKAGE OUTLINE

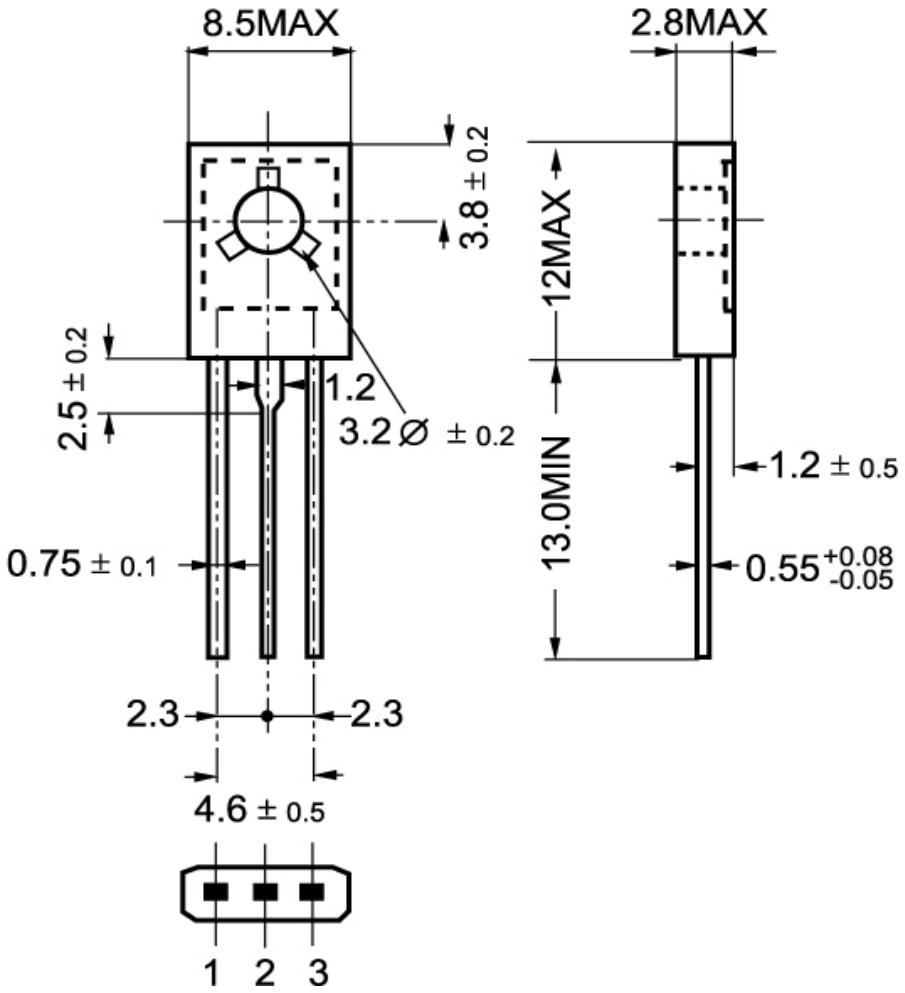

Fig.2 Outline dimensions

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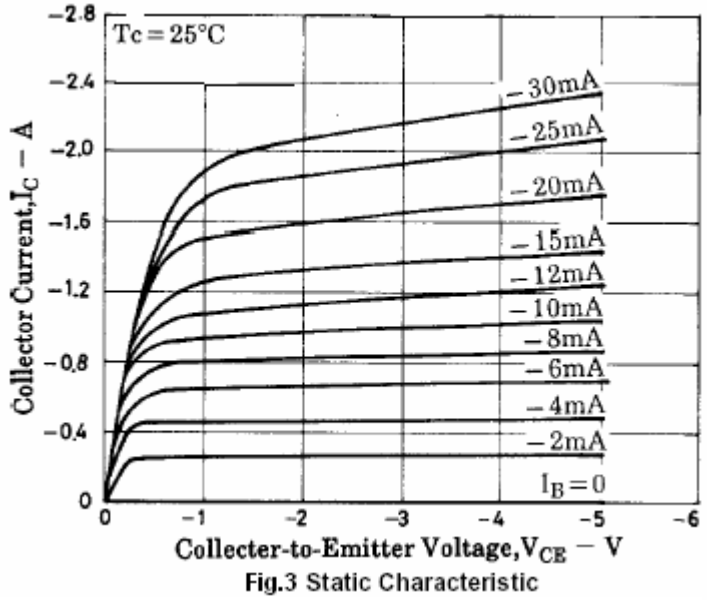

Fig.3 Static Characteristic

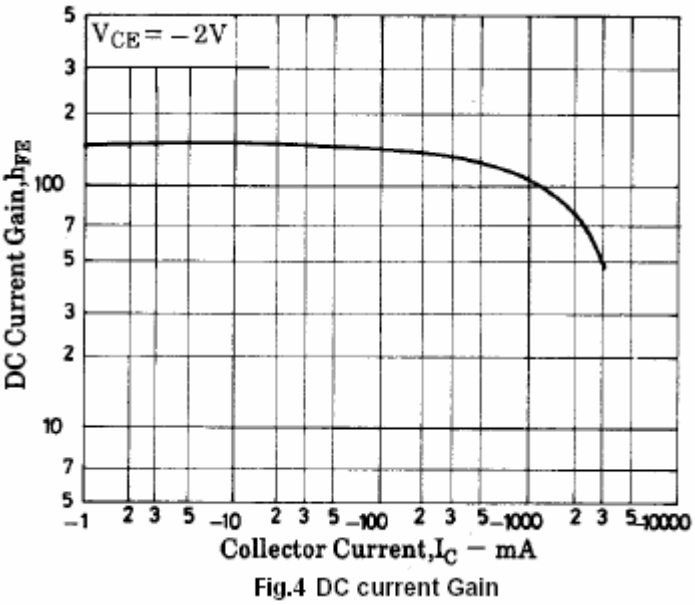

Fig.4 DC current Gain

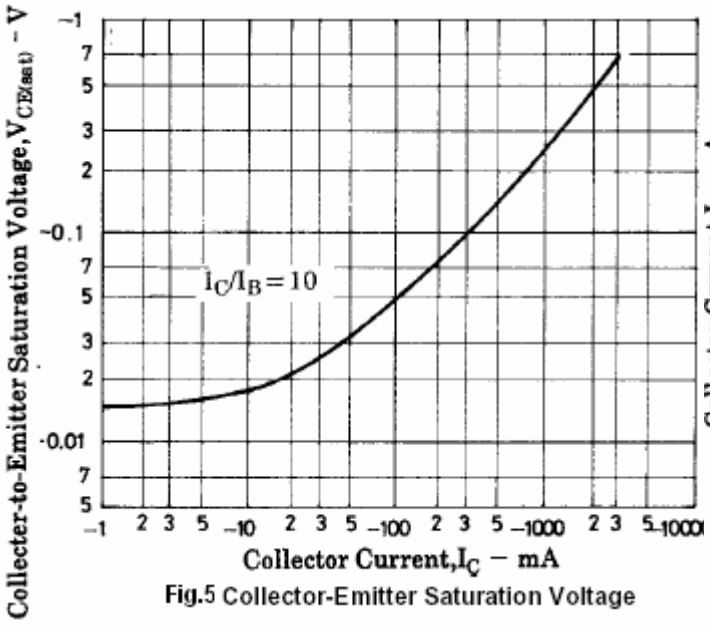

Fig.5 Collector-Emitter Saturation Voltage

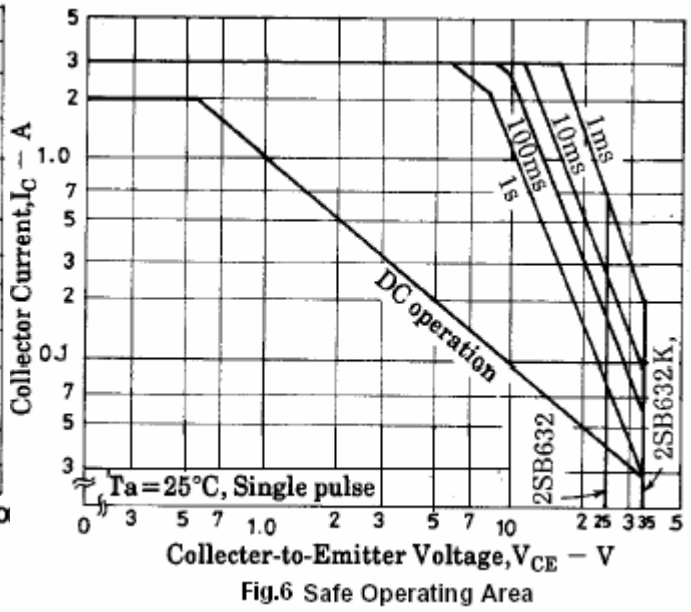

Fig.6 Safe Operating Area