

Silicon PNP Power Transistors

2SA1217

DESCRIPTION

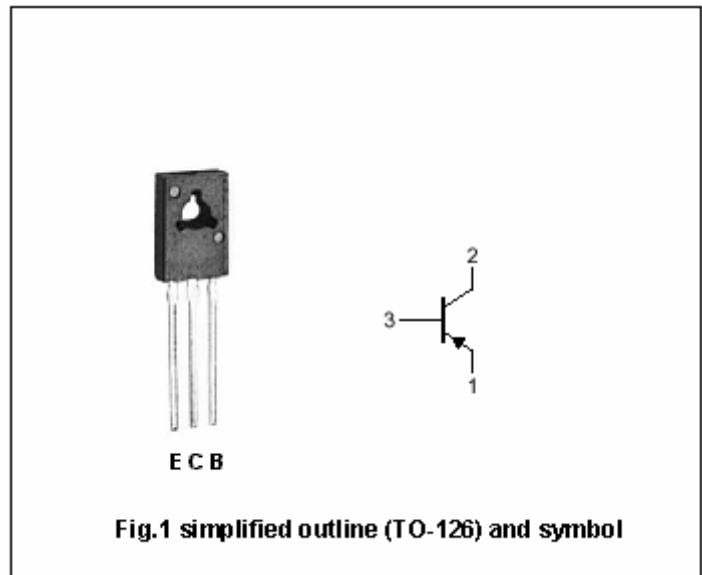
- With TO-126 package
- Complement to type 2SC2877
- Good linearity of h_{FE}

APPLICATIONS

- Audio frequency power amplifier
- Low speed switching
- Suitable for output stage of 5 watts car radio and car stereo

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-40	V
V_{CEO}	Collector-emitter voltage	Open base	-40	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-3	A
I_B	Base current		-1	A
P_D	Total power dissipation	$T_C=25^\circ\text{C}$	10	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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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	I _C =-10mA ; I _B =0	-40			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2.0A ; I _B =-0.2A			-0.8	V
V _{BE}	Base-emitter on voltage	I _C =-0.5A ; V _{CE} =-2V			-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-40V ; I _E =0			-0.1	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-0.1	μ A
h _{FE-1}	DC current gain	I _C =-0.5A ; V _{CE} =-2V	80		240	
h _{FE-2}	DC current gain	I _C =-2.5A ; V _{CE} =-2V	25			
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-2V		100		MHz
C _{OB}	Collector output capacitance	f=1MHz ; V _{CB} =-10V ; I _E =0		35		pF

◆ h_{FE-1} Classifications

O	Y
80-160	120-240

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PACKAGE OUTLINE

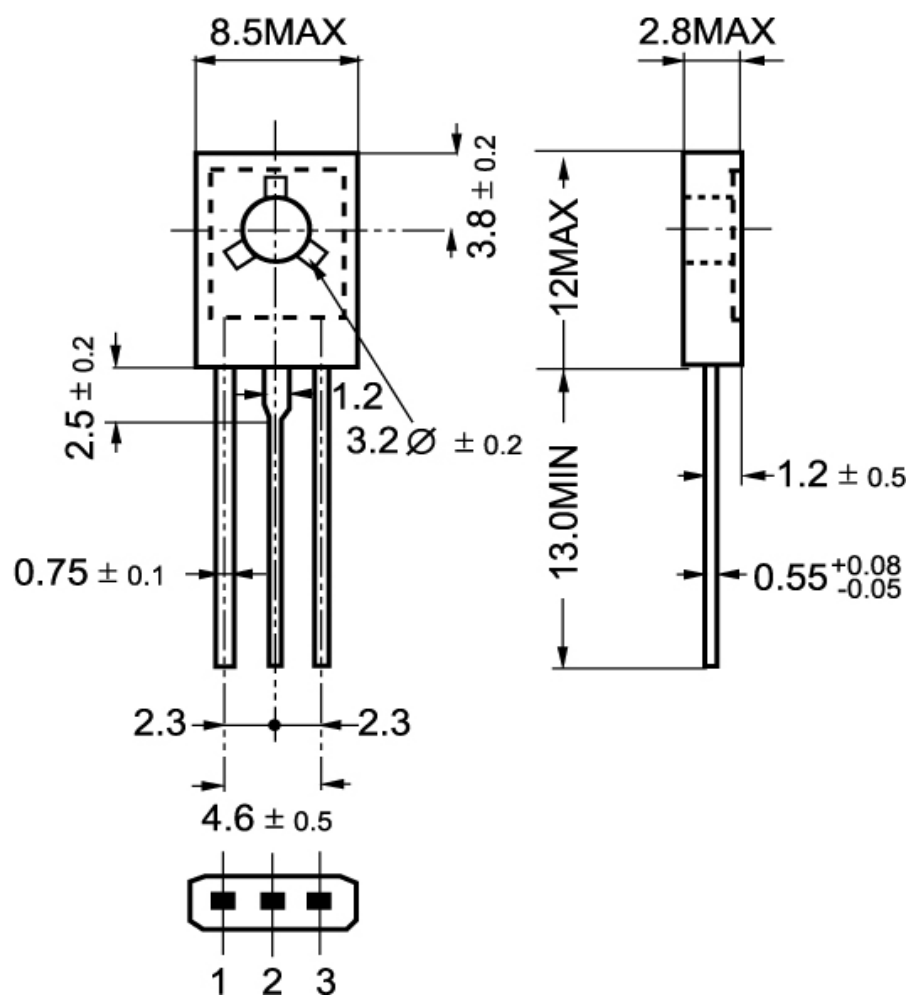


Fig.2 Outline dimensions

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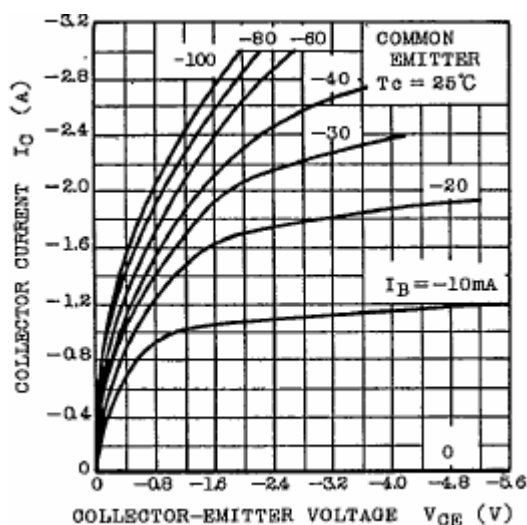


Fig.3 Static Characteristic

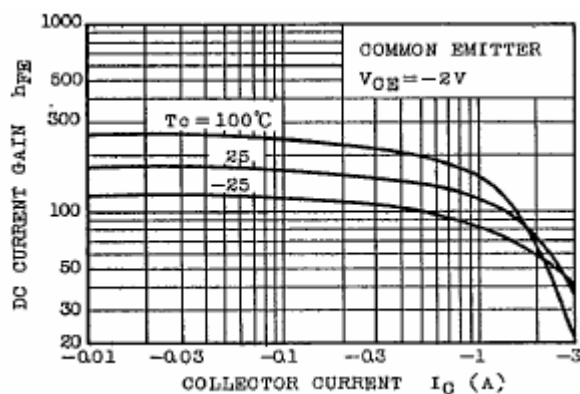


Fig.4 DC current Gain

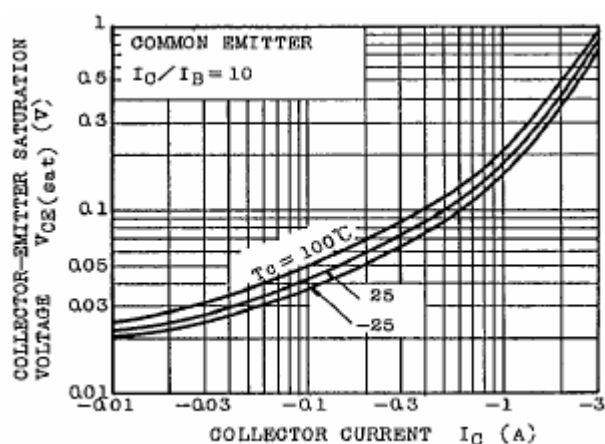


Fig.5 Collector-Emitter Saturation Voltage

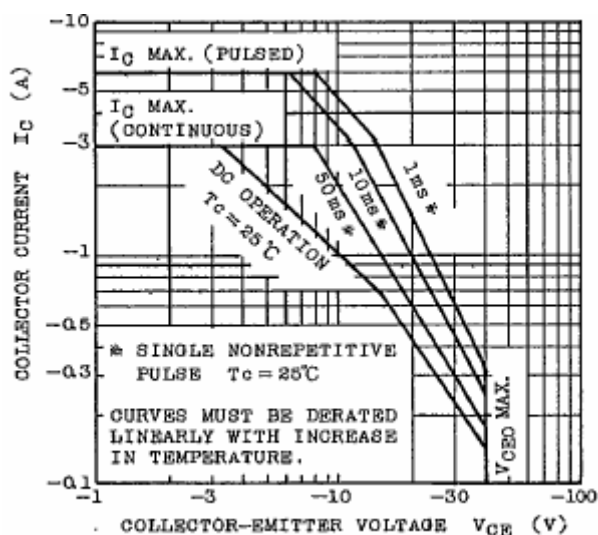


Fig.6 Safe Operating Area