

Silicon PNP Power Transistors

2SB778

DESCRIPTION

- With TO-3PML package
- Complement to type 2SD998

APPLICATIONS

- High power amplifier applications
- Recommended for 45~50W audio frequency amplifier output stage

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

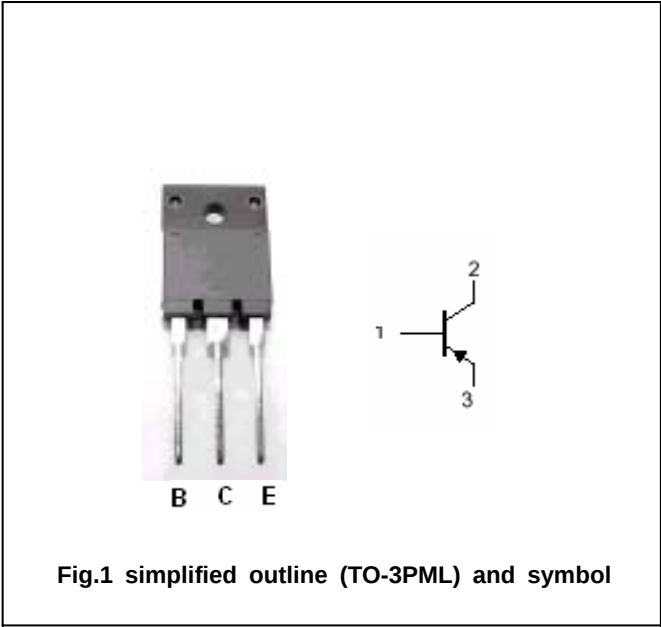


Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-120	V
V _{CEO}	Collector-emitter voltage	Open base	-120	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-10	A
I _B	Base current		-1.0	A
P _C	Collector power dissipation	T _C =25	80	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-50mA ; I _B =0	-120			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-5A ; I _B =-0.5A			-2.5	V
V _{BE}	Base-emitter on voltage	I _C =-5A ; V _{CE} =-5V			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-120V ; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-10	μA
h _{FE}	DC current gain	I _C =-1A ; V _{CE} =-5V	55		160	
f _T	Transition frequency	I _C =-1A ; V _{CE} =-5V		10		MHz
C _{OB}	Collector output capacitance	I _E =0 ; f=1MHz ; V _{CB} =-10V		280		pF

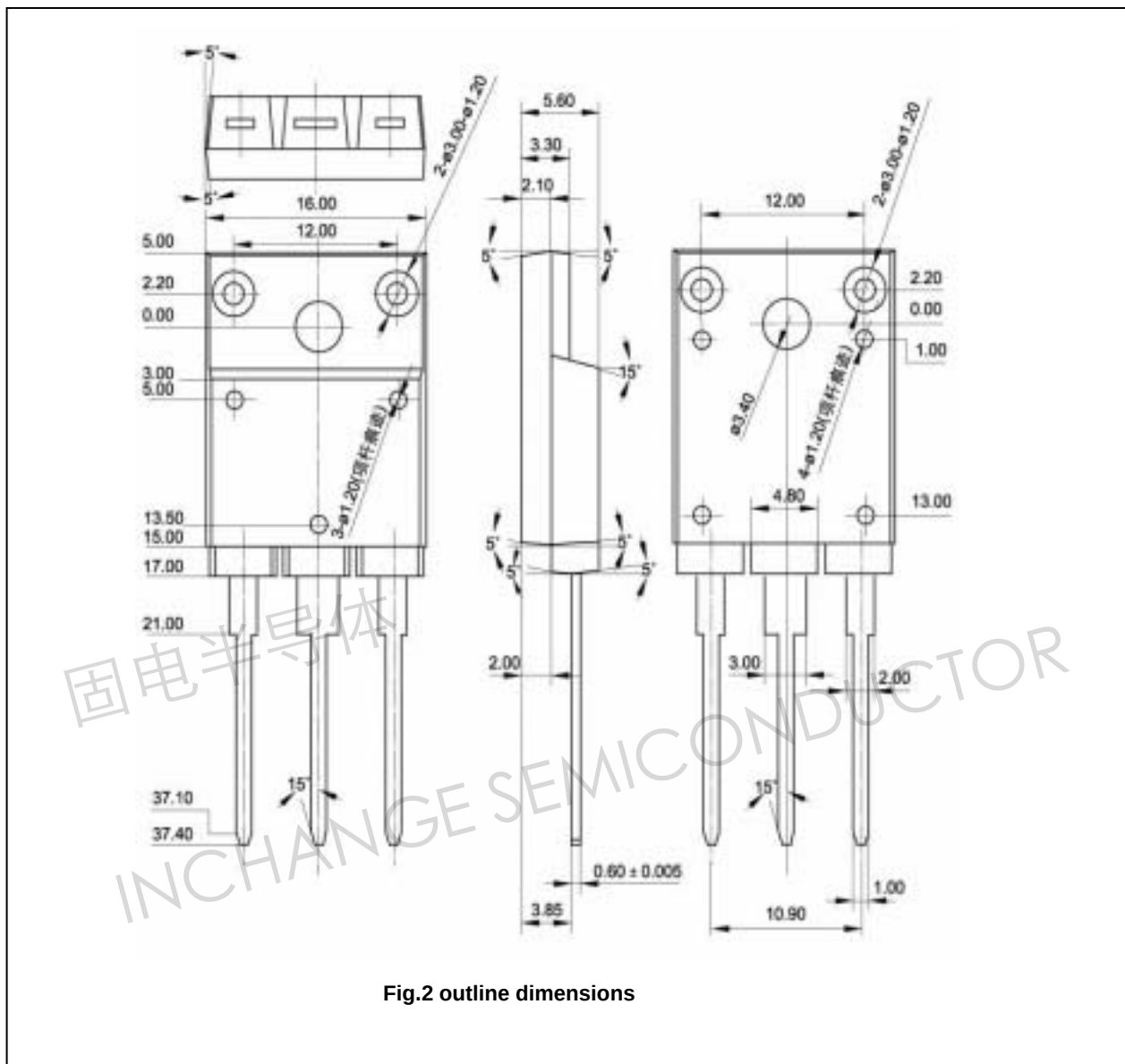
◆ h_{FE} Classifications

R	O
55-110	80-160

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PACKAGE OUTLINE



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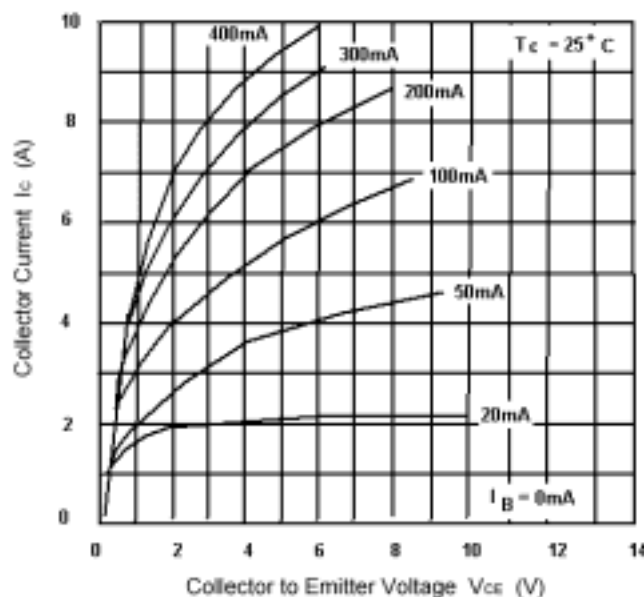


Fig.3 Static Characteristic

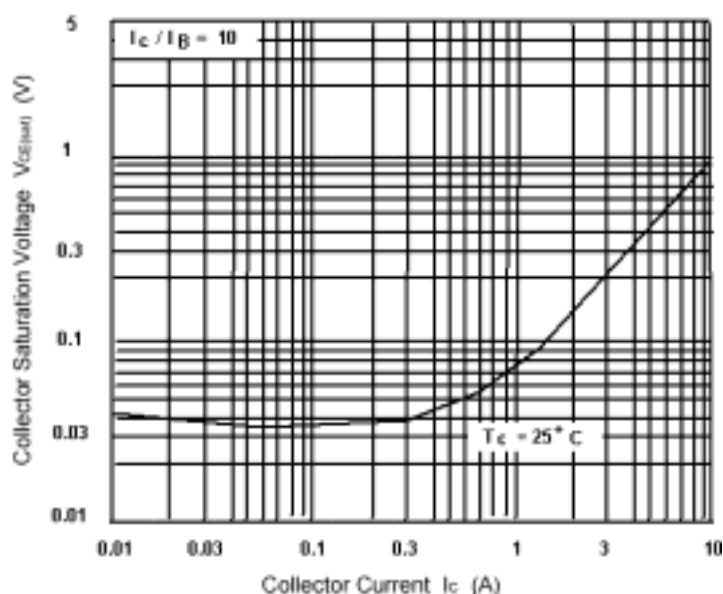


Fig.4 Collector-Emitter Saturation Voltage

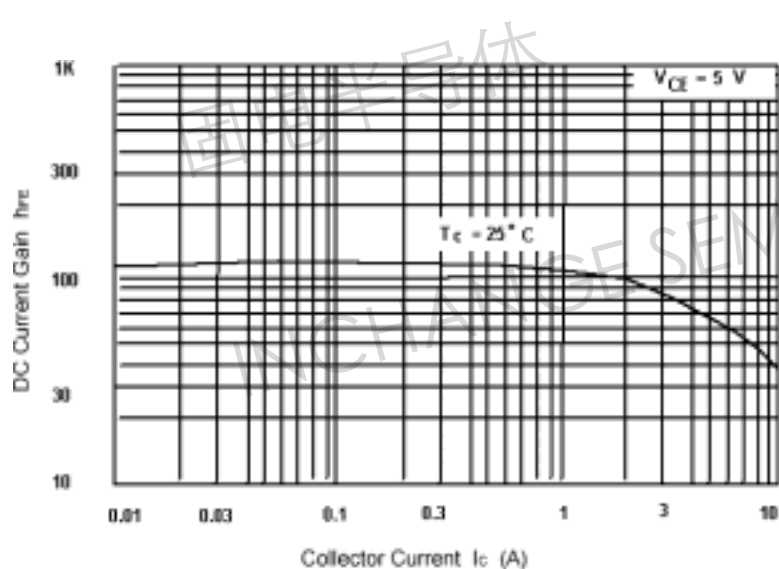


Fig.5 DC current Gain

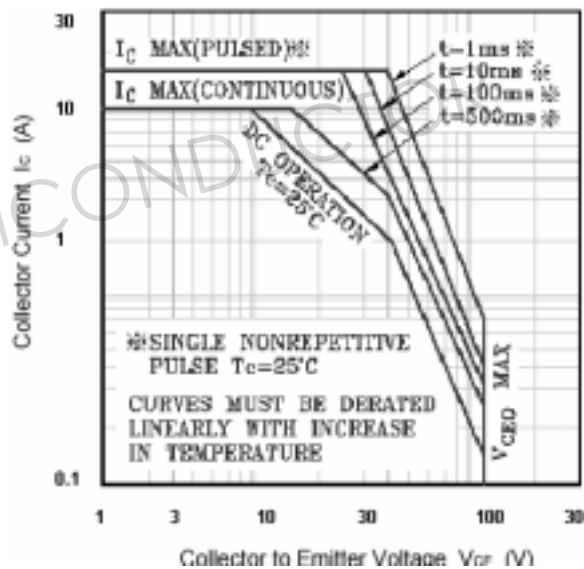


Fig.6 Safe Operating Area