

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

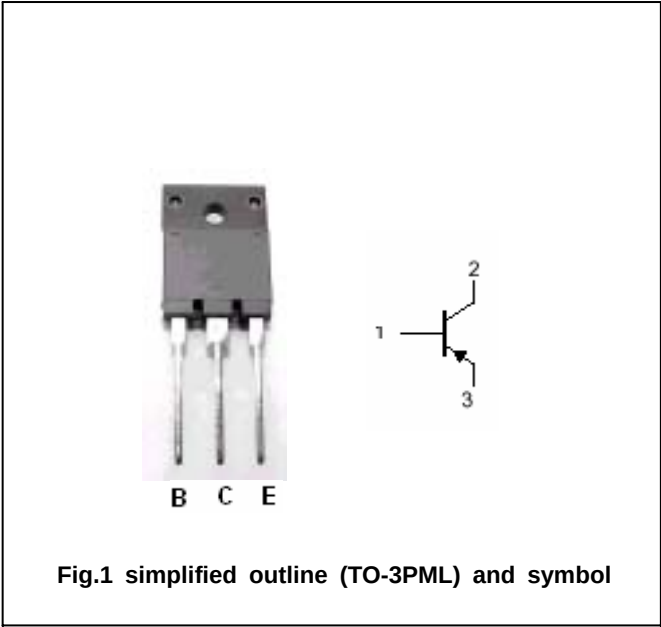


Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings (Ta=25°C)

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	$T_C=25^{\circ}C$	80	W
T_j	Junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-55~150	$^{\circ}C$

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CHARACTERISTICS

Tj=25°C 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

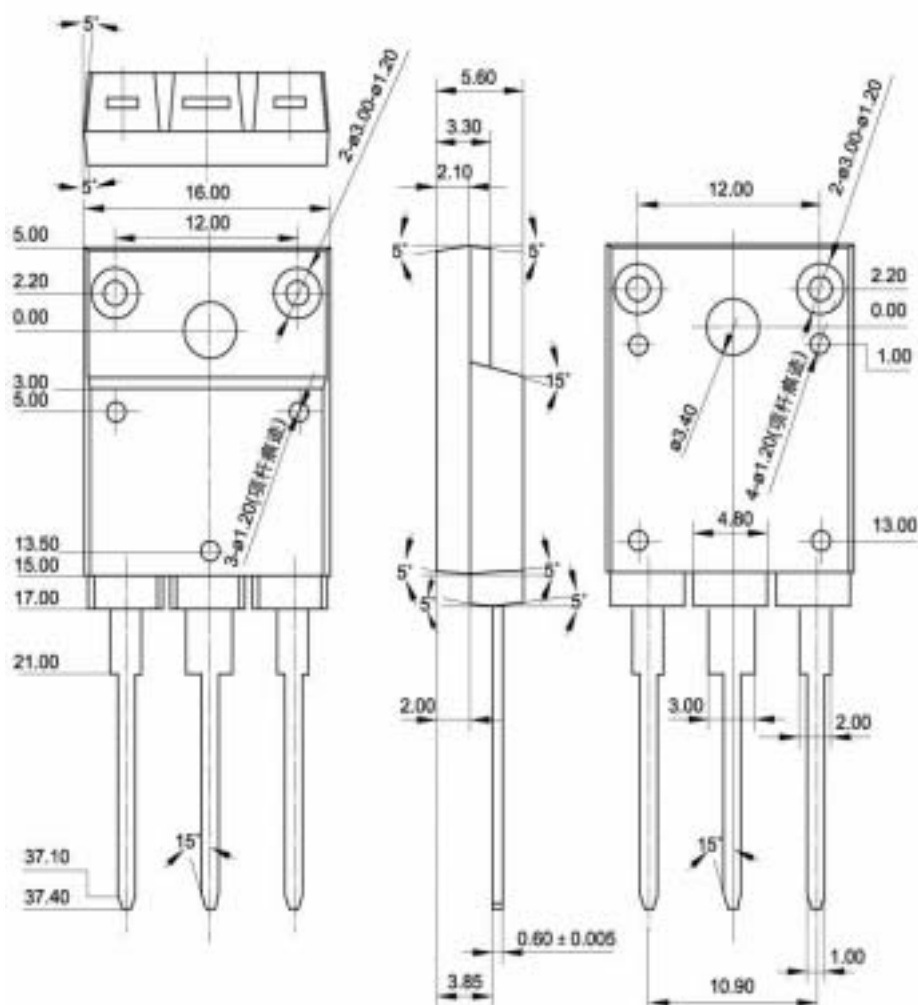


Fig.2 outline dimensions

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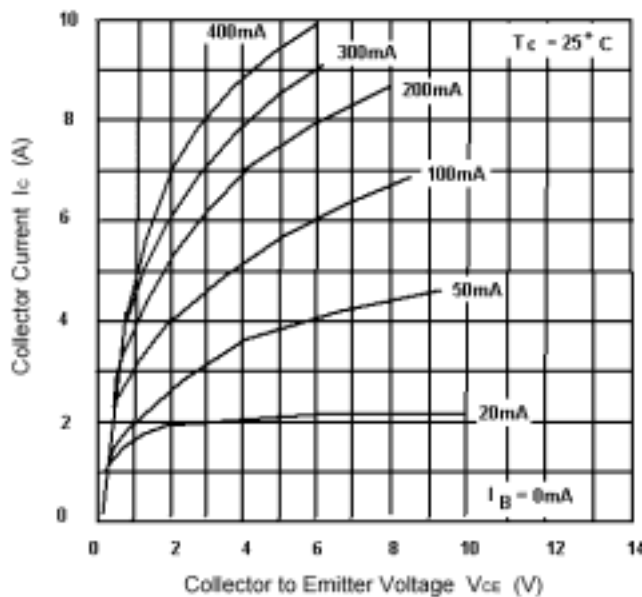


Fig.3 Static Characteristic

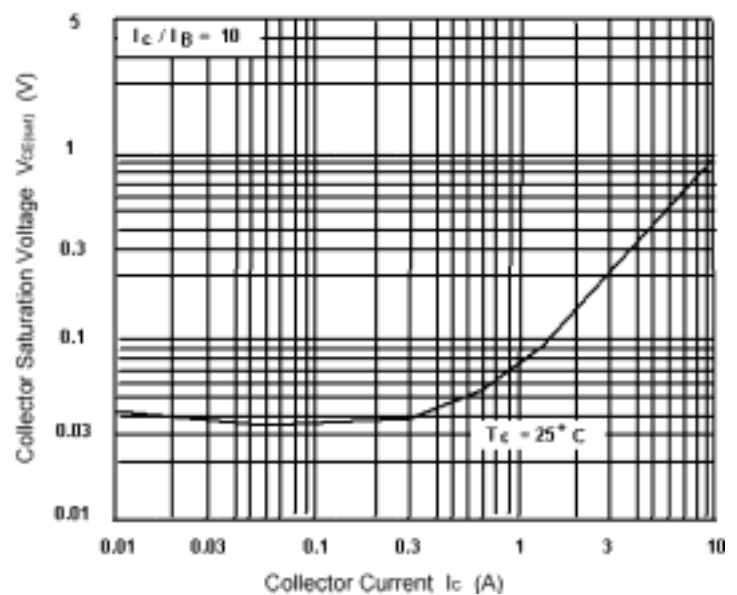


Fig.4 Collector-Emitter Saturation Voltage

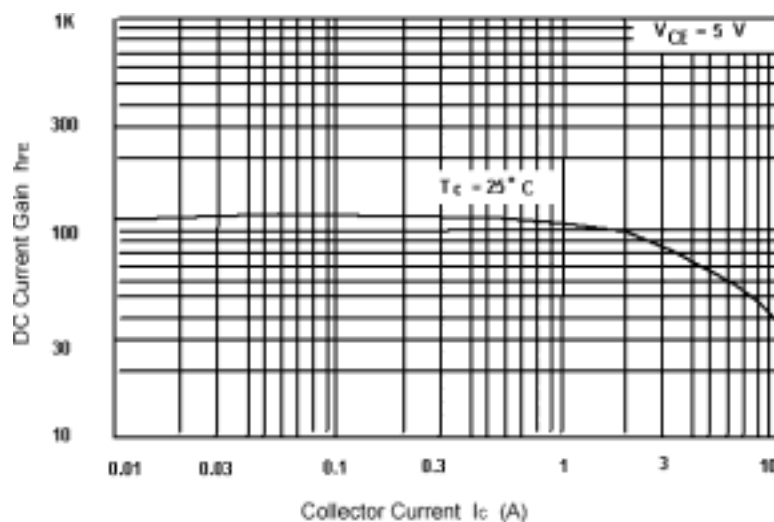


Fig.5 DC current Gain

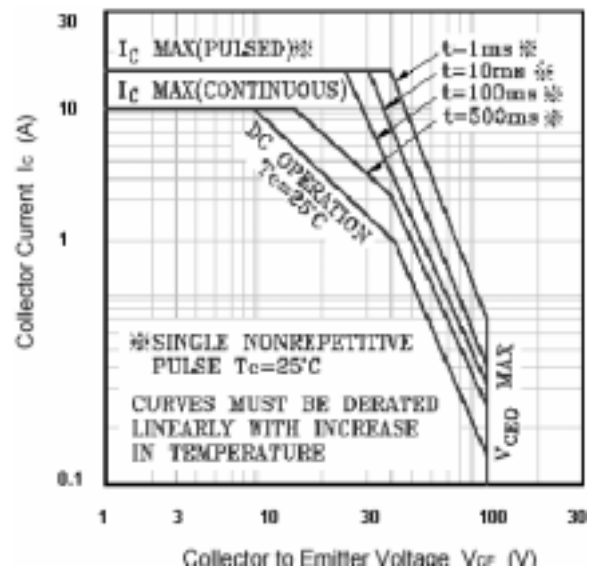


Fig.6 Safe Operating Area