

Silicon PNP Power Transistors

2SA1673

DESCRIPTION

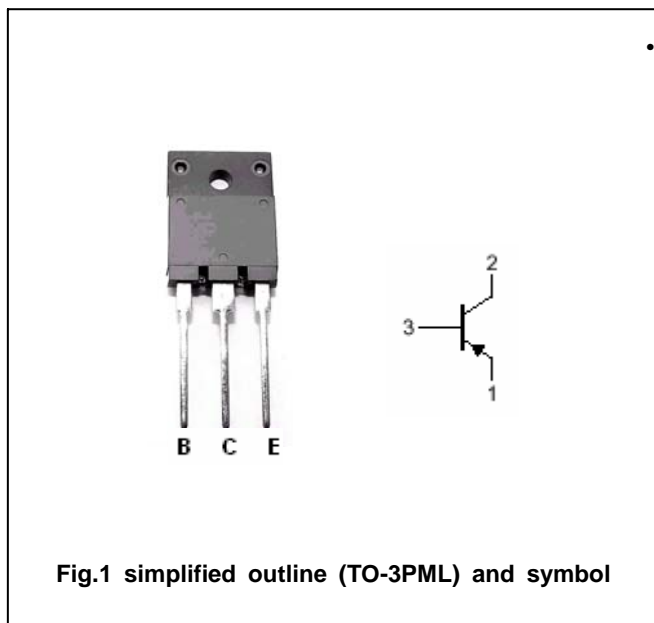
- With TO-3PML package
- Complement to type 2SC4388

APPLICATIONS

- Audio and general purpose

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-180	V
V_{CEO}	Collector-emitter voltage	Open base	-180	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-15	A
I_B	Base current		-4	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	85	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

 $T_j=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-50\text{mA}; I_B=0$	-180			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-5\text{A}; I_B=-0.5\text{A}$			-2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-180\text{V}; I_E=0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6\text{V}; I_C=0$			-10	μA
h_{FE}	DC current gain	$I_C=-3\text{A}; V_{CE}=-4\text{V}$	50		180	
f_T	Transition frequency	$I_C=-0.5\text{A}; V_{CE}=-12\text{V}$		20		MHz
C_{OB}	Output capacitance	$I_E=0; V_{CB}=-10\text{V}; f=1\text{MHz}$		500		pF

Switching times

t_{on}	Turn-on time	$I_C=-10\text{A}; R_L=4\ \Omega$ $I_{B1}=-I_{B2}=-1\text{A}$ $V_{CC}=-40\text{V}$		0.60		μs
t_s	Storage time			0.90		μs
t_f	Fall time			0.20		μs

◆ h_{FE} classifications

O	P	Y
50-100	70-140	90-180

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PACKAGE OUTLINE

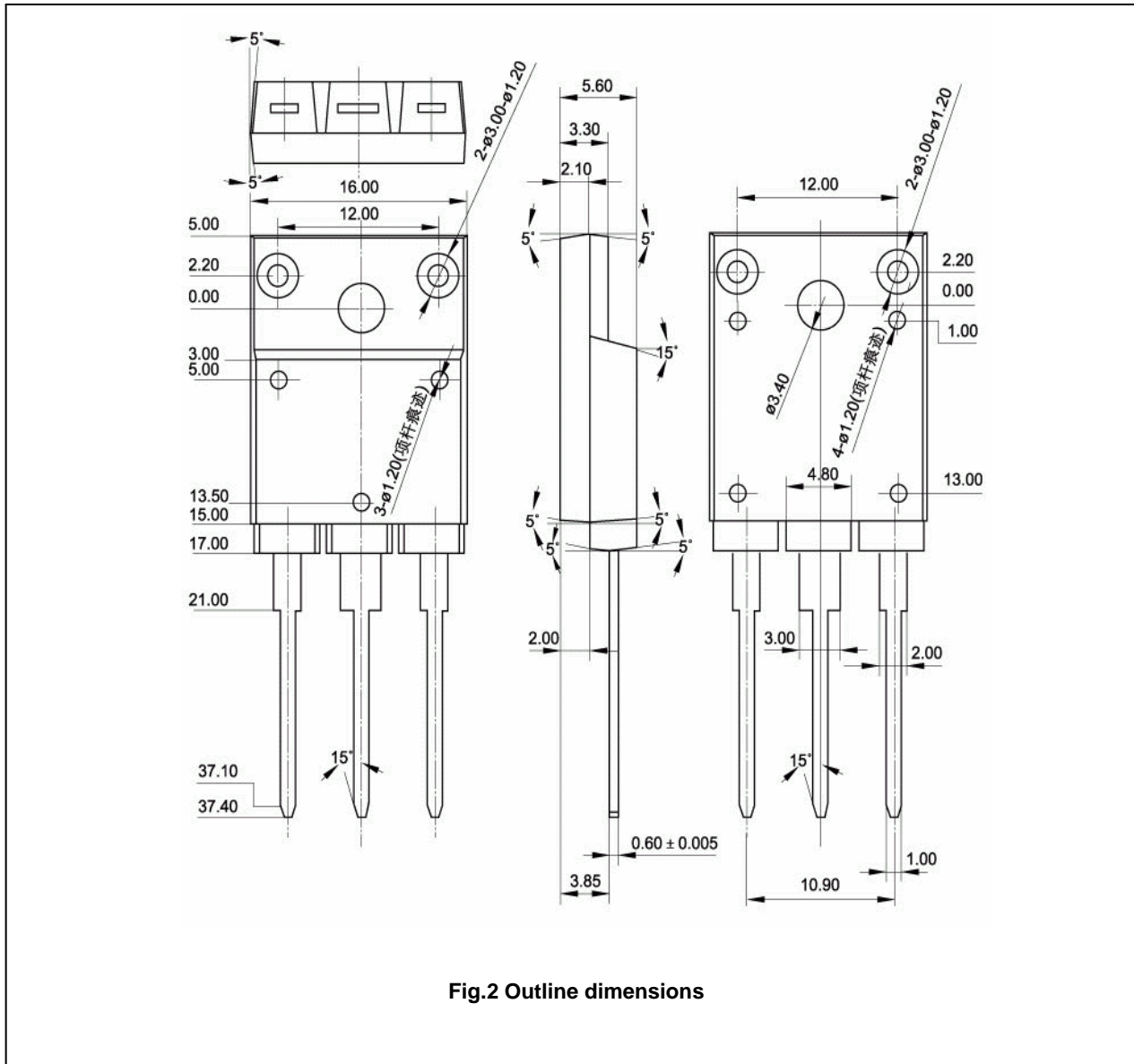


Fig.2 Outline dimensions

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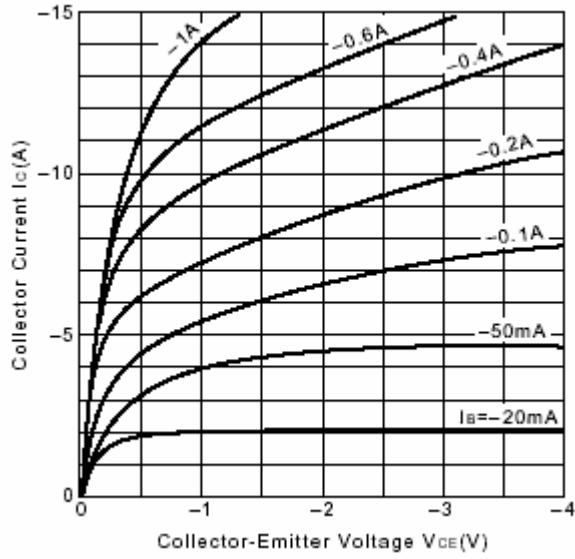


Fig.3 Static Characteristic

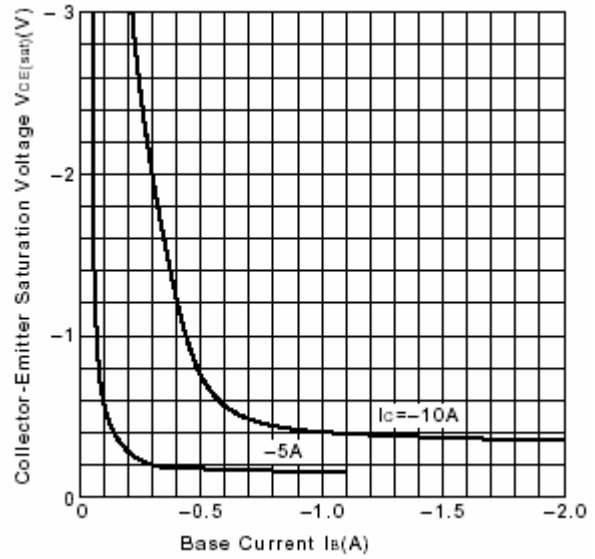


Fig.4 $V_{CE(sat)}$ - I_B Characteristics

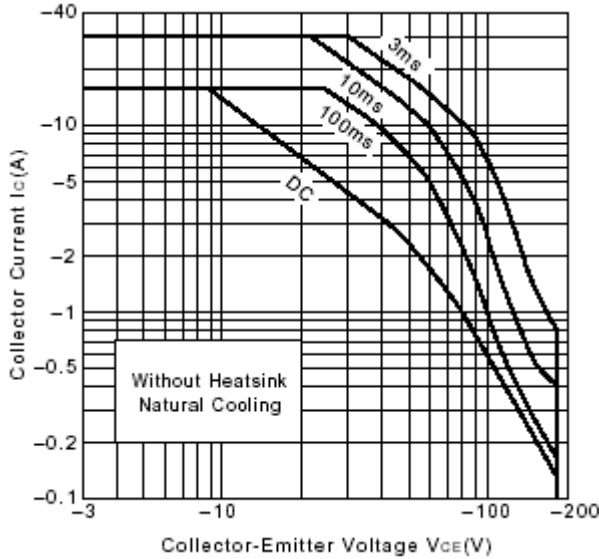


Fig.5 Safe Operating Area

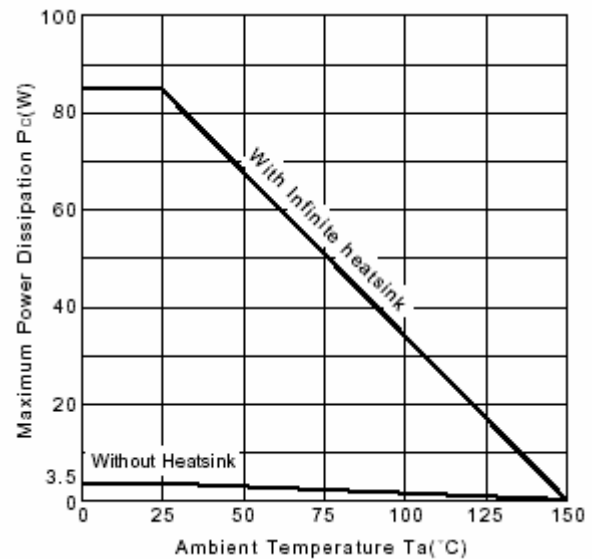


Fig.6 P_c - T_a Derating

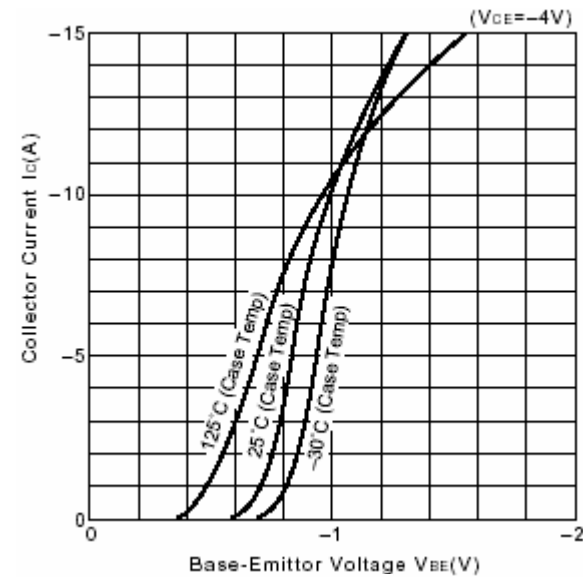


Fig.7 I_C - V_{BE}

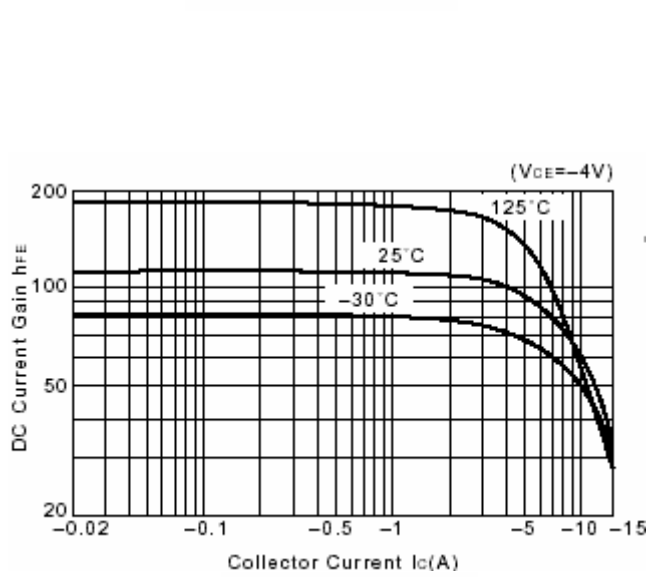


Fig.8 DC current Gain