

Silicon PNP Power Transistors

2SA1567

DESCRIPTION

- With TO-220F package
- Complement to type 2SC4064
- Low collector-emitter saturation voltage

APPLICATIONS

- For DC motor driver ,chopper regulator and general purpose applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

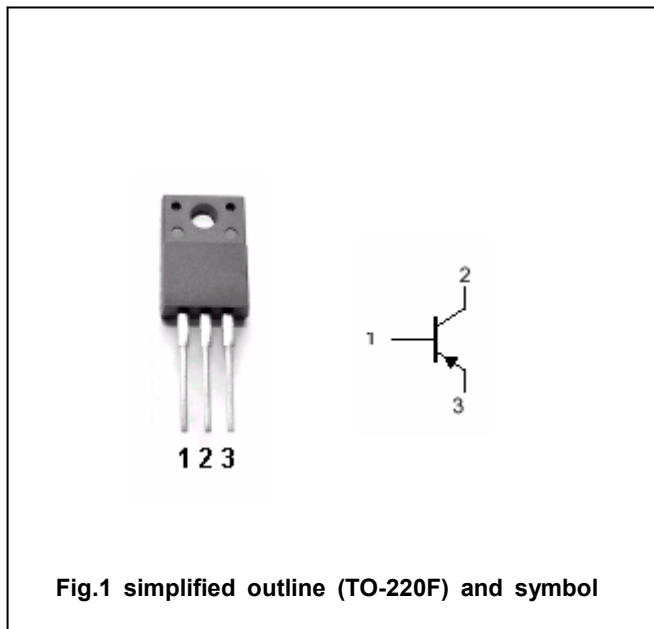


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-50	V
V _{CEO}	Collector-emitter voltage	Open base	-50	V
V _{EBO}	Emitter-base voltage	Open collector	-6	V
I _C	Collector current		-12	A
I _B	Base current		-3	A
P _C	Collector power dissipation	T _C =25°C	35	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°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	$I_C=-25mA; I_B=0$	-50			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-6A; I_B=-0.3 A$			-0.35	V
I_{CBO}	Collector cut-off current	$V_{CB}=-50V; I_E=0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6V; I_C=0$			-100	μA
h_{FE}	DC current gain	$I_C=-6A; V_{CE}=-1V$	50			
f_T	Transition frequency	$I_E=0.5A; V_{CE}=-12V$		40		MHz
C_{OB}	Output capacitance	$I_E=0; V_{CB}=-10V; f=1MHz$		330		pF

Switching times

t_{on}	Turn-on time	$I_C=-6A; R_L=4\Omega$ $I_{B1}=-I_{B2}=-0.12A$ $V_{CC}=-24V$		0.40		μs
t_s	Storage time			0.40		μs
t_f	Fall time			0.20		μs

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PACKAGE OUTLINE

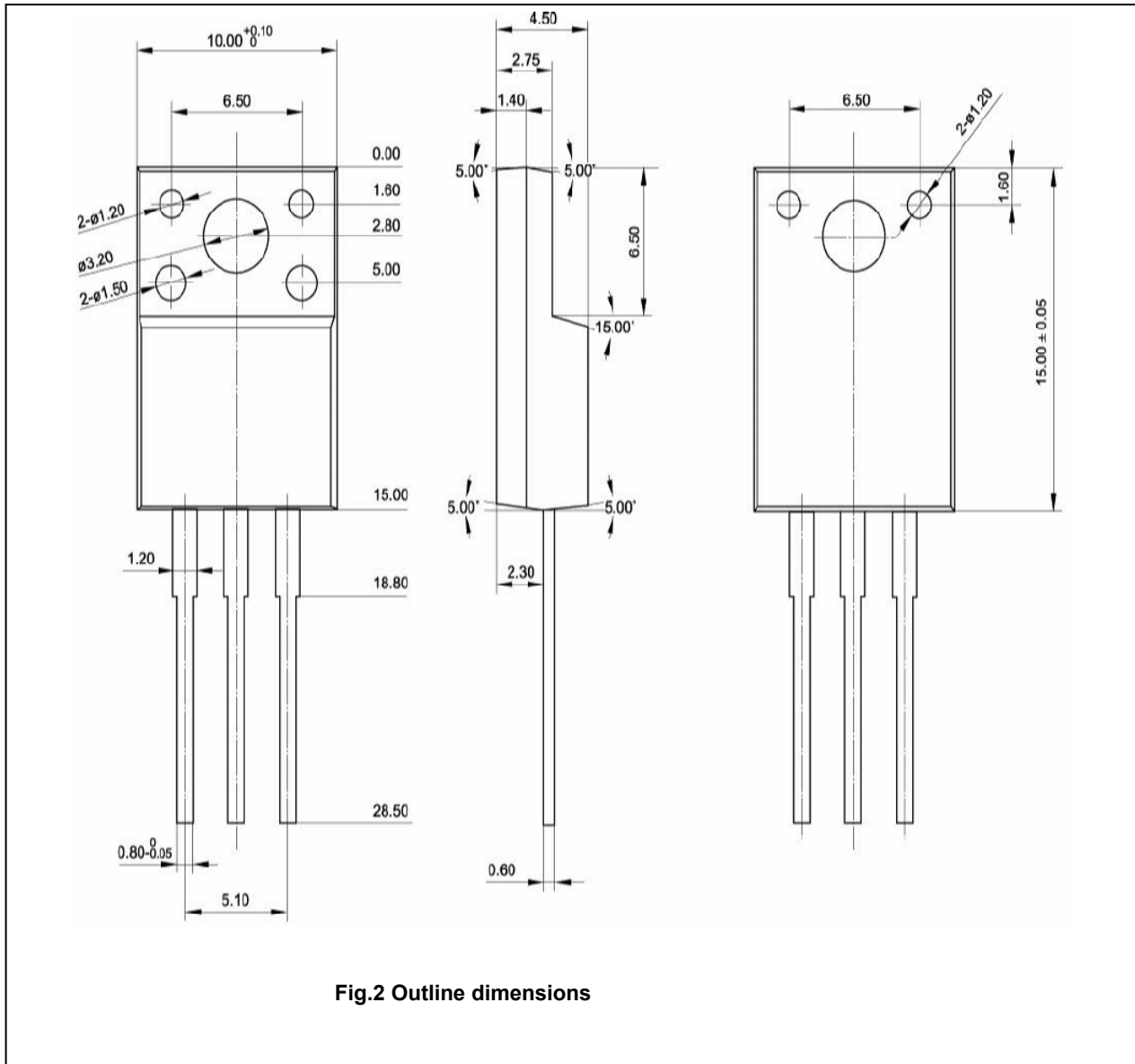


Fig.2 Outline dimensions

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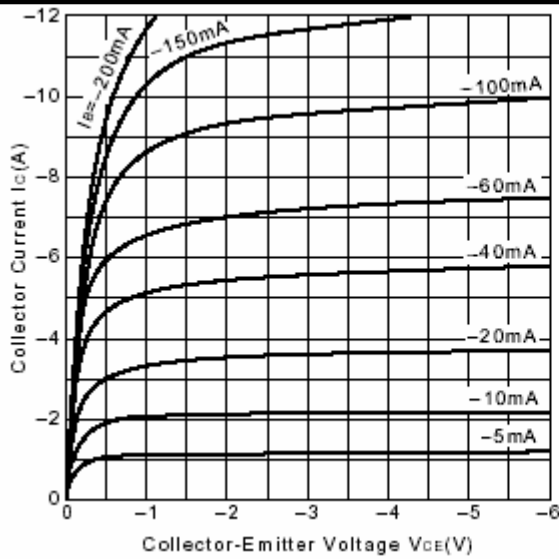


Fig.3 Static Characteristic

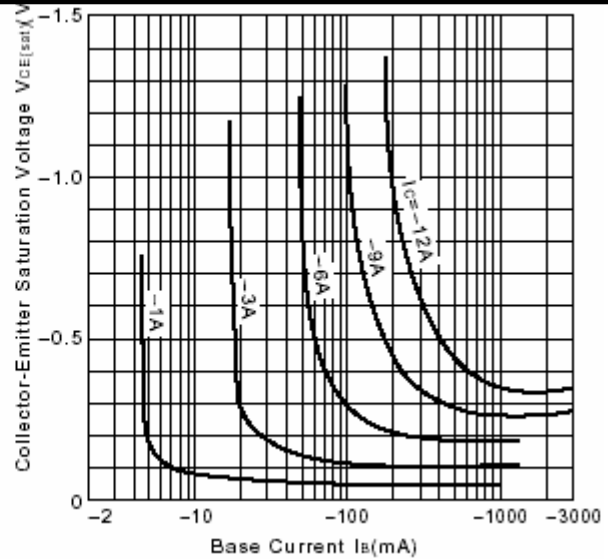


Fig.4 $V_{CE(sat)}$ - I_B Characteristics

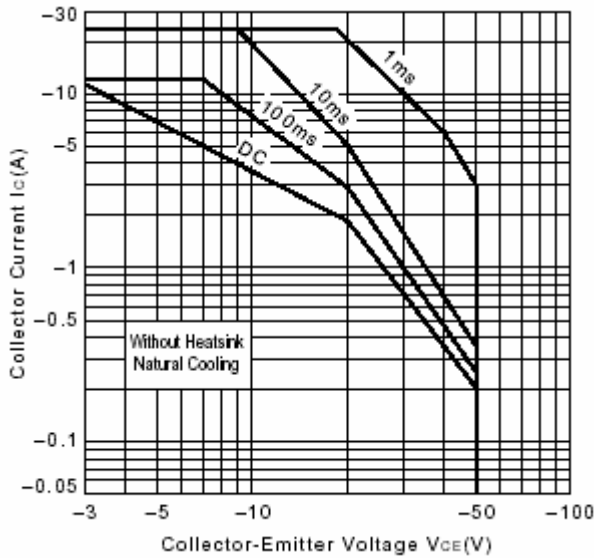


Fig.5 Safe Operating Area

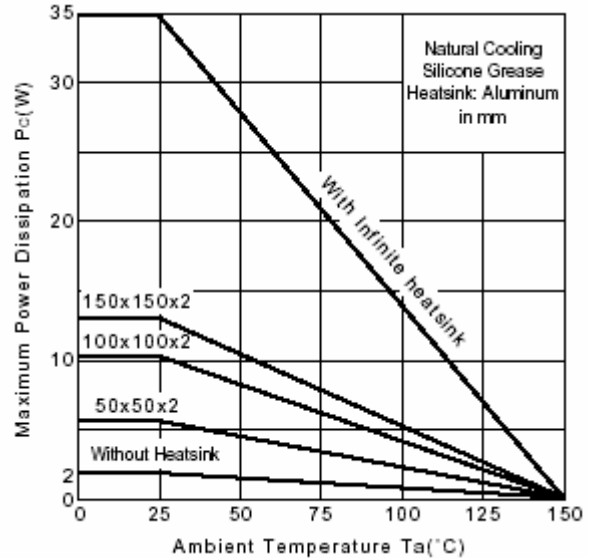


Fig.6 P_c - T_a Derating

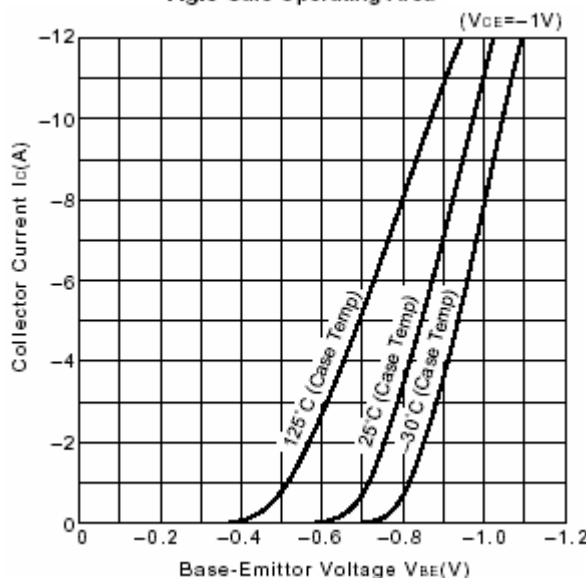


Fig.7 I_C - V_{BE}

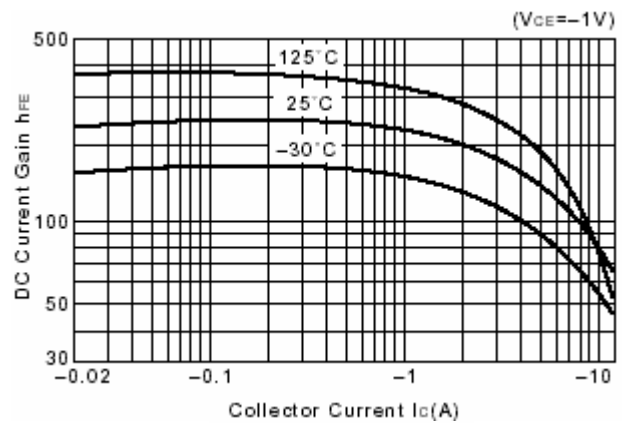


Fig.8 DC current Gain