

Silicon PNP Power Transistors

2SA1386 2SA1386A

DESCRIPTION

- With TO-3PN package
- Complement to type 2SC3519/3519A

APPLICATIONS

- Audio and general purpose

PINNING

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

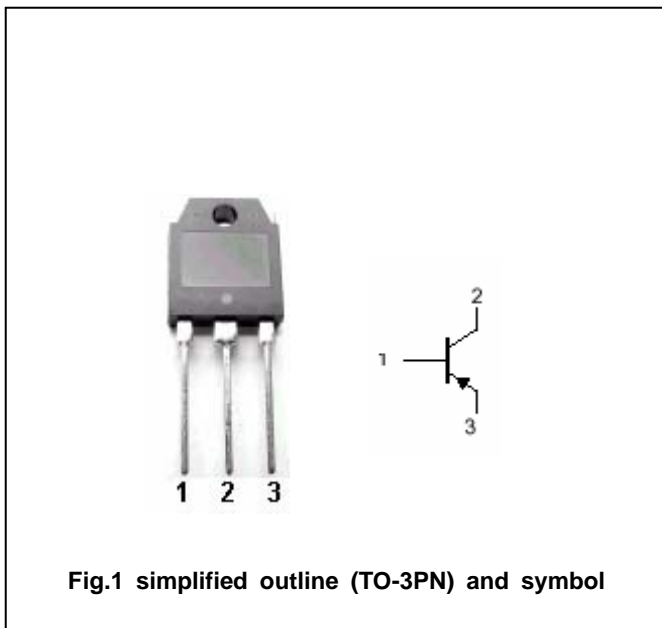


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2SA1386	-160	V
		2SA1386A	-180	
V _{CEO}	Collector-emitter voltage	2SA1386	-160	V
		2SA1386A	-180	
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-15	A
I _B	Base current		-4	A
P _C	Collector power dissipation	T _C =25	130	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	2SA1386	I _C =-25mA ; I _B =0	-160			V
		2SA1386A		-180			
V _{CEsat}	Collector-emitter saturation voltage	I _C =-5A; I _B =-0.5A			-2.0	V	
I _{CBO}	Collector cut-off Current	2SA1386	V _{CB} =-160V; I _E =0			-100	μ A
		2SA1386A		V _{CB} =-180V; I _E =0			
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-100	μ A	
h _{FE}	DC current gain	I _C =-5A ; V _{CE} =-4V	50		180		
C _{ob}	Output capacitance	I _E =0 ; V _{CB} =10V;f=1MHz		500		pF	
f _T	Transition frequency	I _C =-2A ; V _{CE} =-12V		40		MHz	
Switching times							
t _{on}	Turn-on time	I _C =-5A;R _L =4 I _{B1} =-I _{B2} =-1A V _{CC} =40V		0.30		μ s	
t _s	Storage time			0.70		μ s	
t _f	Fall time			0.20		μ s	

◆ h_{FE} Classifications

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

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PACKAGE OUTLINE

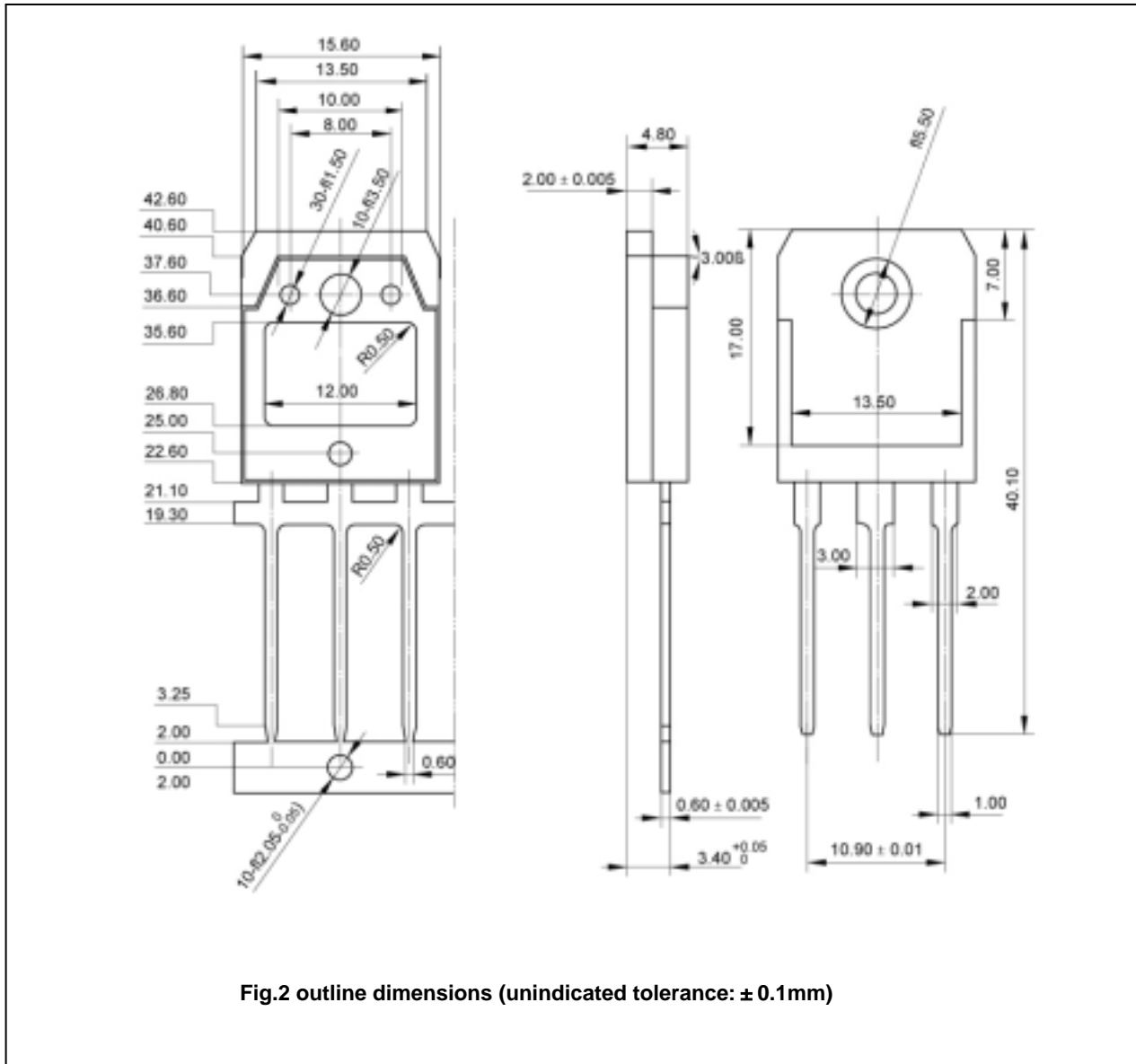


Fig.2 outline dimensions (unindicated tolerance: ± 0.1mm)

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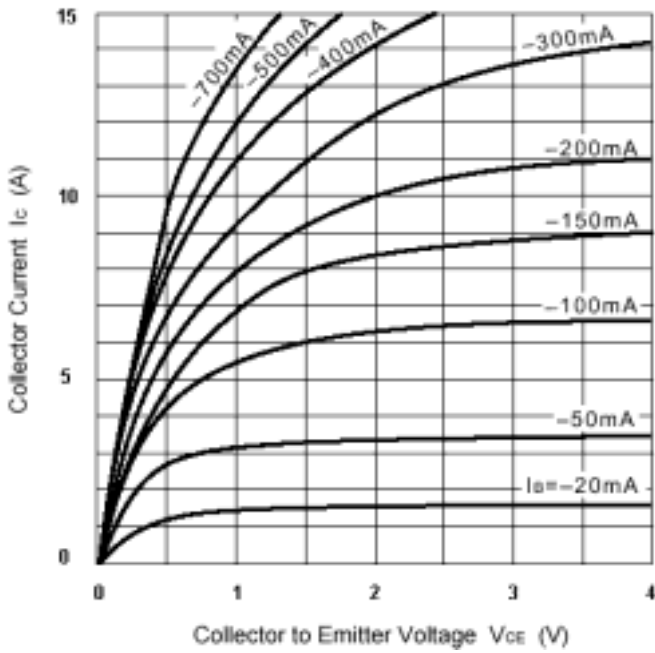


Fig.3 Static Characteristic

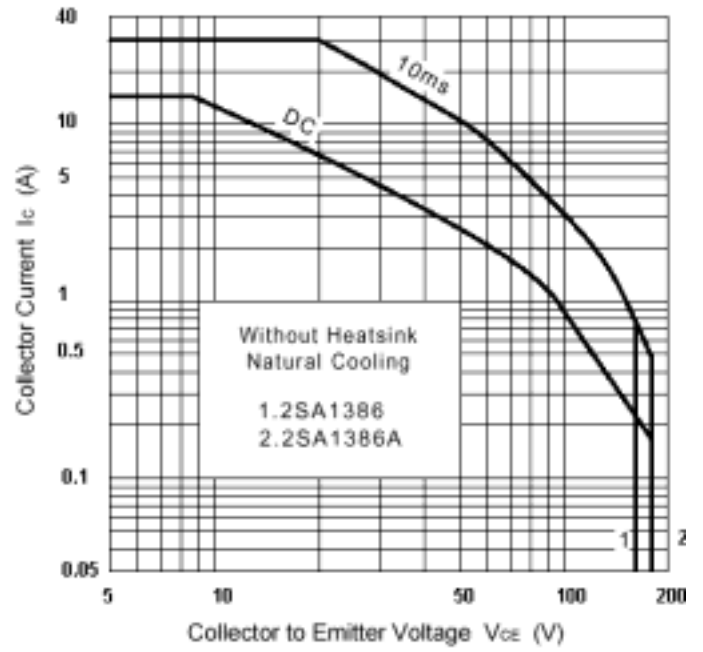


Fig.4 Safe Operating Area

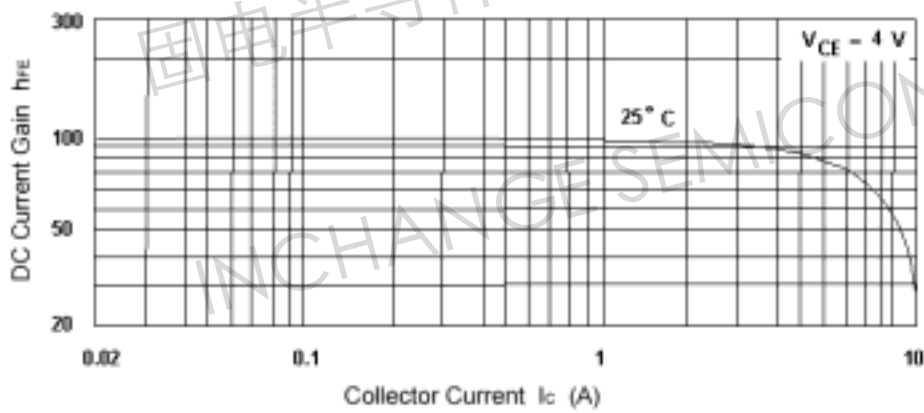


Fig.5 DC current Gain