

Silicon NPN Power Transistors

2SC3365

DESCRIPTION

With TO-3PN package

·High voltage ,high speed

APPLICATIONS

·For high speed and high power switching applications

PINNING

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

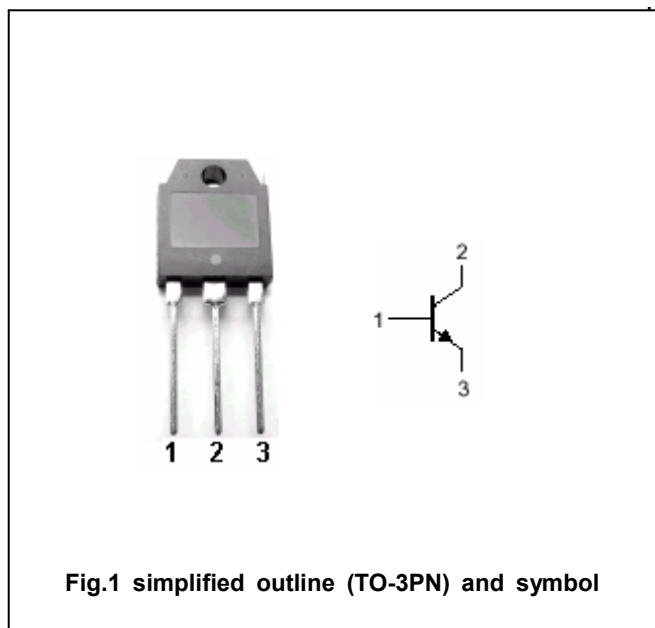


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	10	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		20	A
I_B	Base current		5	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; R _{BE} =∞, L=100mH	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA ; I _C =0	10			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A ; I _B =1A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =1A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =400V ; I _E =0			50	μA
I _{CEO}	Collector cut-off current	V _{CE} =350V ; R _{BE} =∞			50	μA
h _{FE-1}	DC current gain	I _C =5A ; V _{CE} =5V	12			
h _{FE-2}	DC current gain	I _C =10A ; V _{CE} =5V	5			

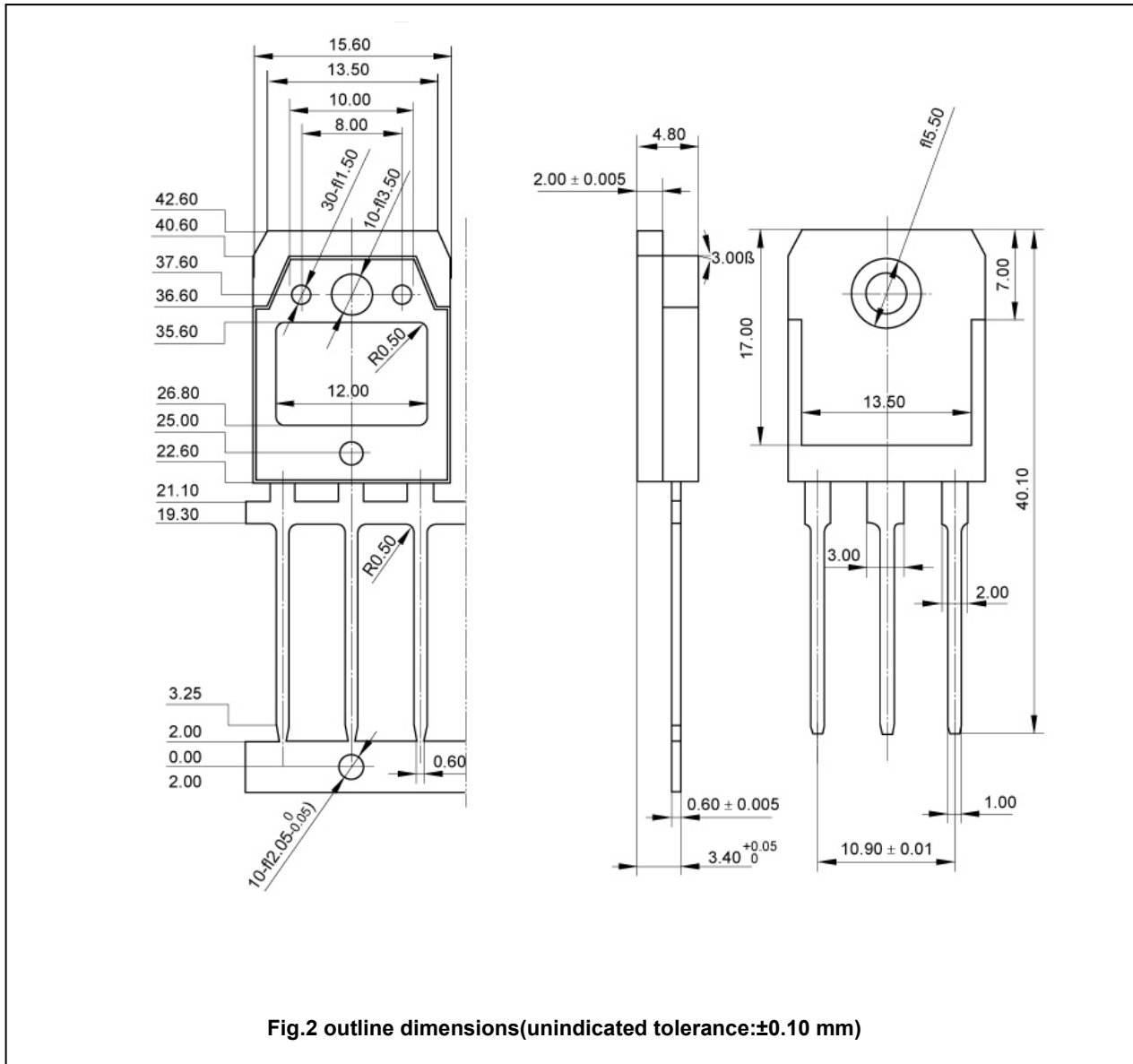
Switching times resistive load

t _{on}	Turn-on time	I _C =10A ; I _{B1} =-I _{B2} =2A V _{CC} ≈150V			1.0	μs
t _s	Storage time				2.5	μs
t _f	Fall time				1.0	μs

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PACKAGE OUTLINE



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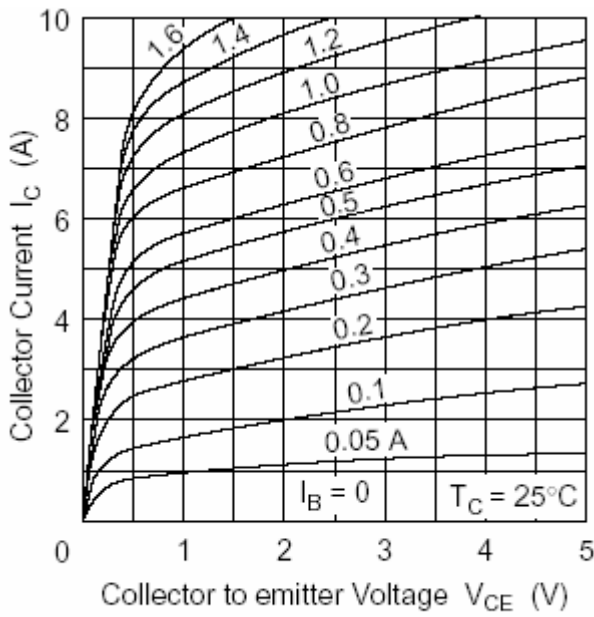


Fig.3 Static Characteristic

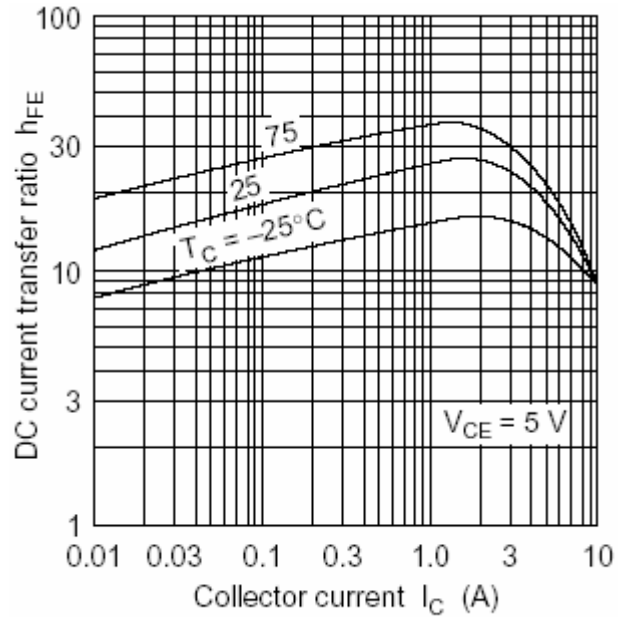


Fig.4 DC current Gain

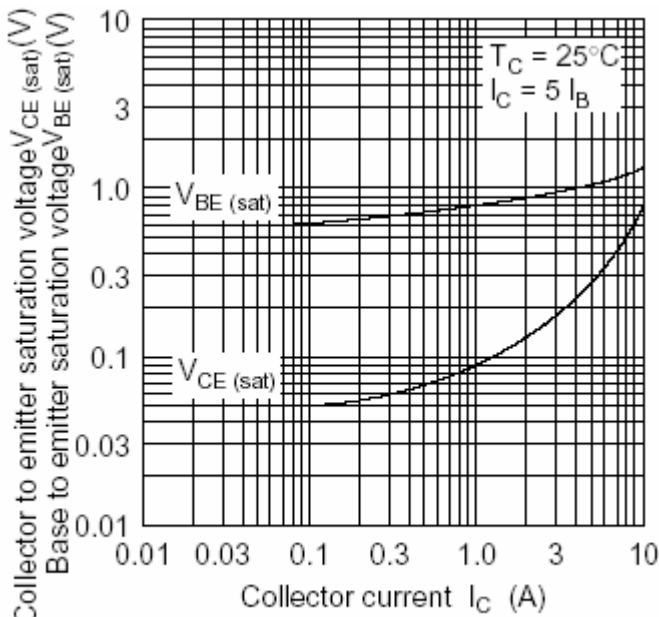


Fig.5 Base-Emitter Saturation Voltage
Collector-Emmitter Saturation Voltage

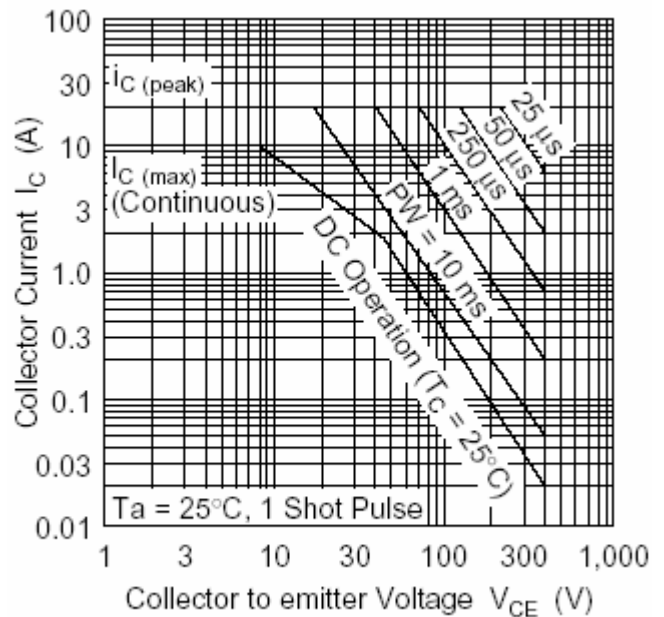


Fig.6 Safe Operating Area