

Silicon PNP Power Transistors

TIP32C

DESCRIPTION

- With TO-220C package
- Complement to type TIP31C

APPLICATIONS

- Medium power linear and switching applications

PINNING

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

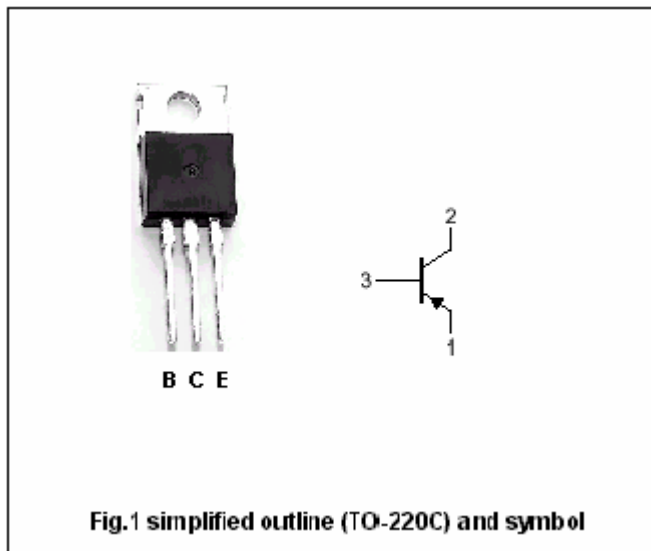


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-100	V
V _{CEO}	Collector-emitter voltage	Open base	-100	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-3	A
I _{CM}	Collector current-Pulse		-5	A
I _B	Base current		-1	A
P _C	Collector power dissipation	T _C =25°C	40	W
		T _a =25°C	2	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C
R _{th j-case}	Thermal resistance ,junction to case		3.125	°C/W
R _{th j-amb}	Thermal resistance ,junction to ambient		62.5	°C/W
Solderability		230±5°C; 3±0.5s	≥95% term covered by new solder	
Resistance to soldering heat		260±5°C; 10±0.5s	No remarkable damage	

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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 =-30mA; I _B =0	-100			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A ; I _B =-0.375A			-1.2	V
V _{BE}	Base-emitter on voltage	I _C =-3A ; V _{CE} =-4V			-1.8	V
I _{CES}	Collector cut-off current	V _{CE} =-100V; V _{EB} =0			-0.2	mA
I _{CEO}	Collector cut-off current	V _{CE} =-60V; I _B =0			-0.3	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-4V	25			
h _{FE-2}	DC current gain	I _C =-3A ; V _{CE} =-4V	10		50	
f _T	Transiton frequency	I _C =-0.5A ; V _{CE} =-10V	3			MHz

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PACKAGE OUTLINE

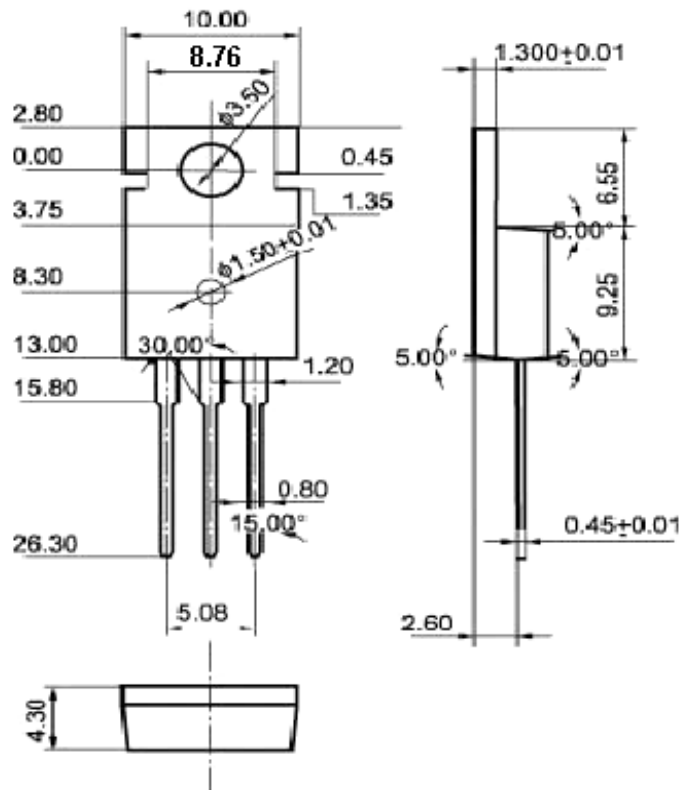


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)

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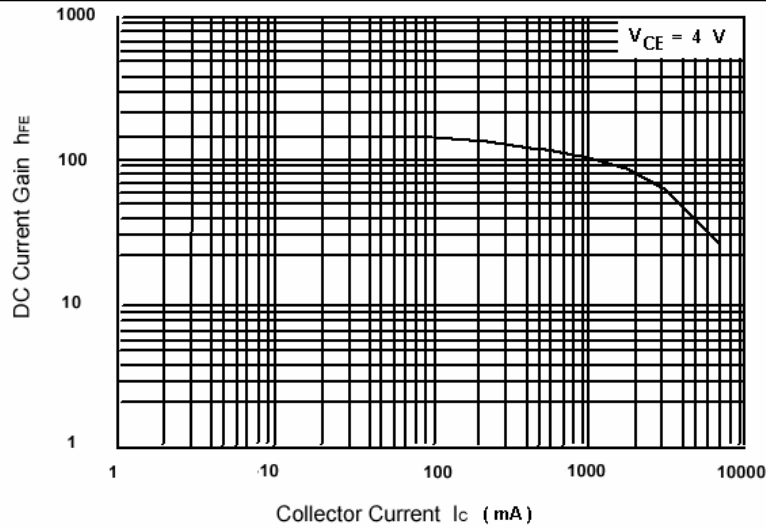


Fig.3 DC current Gain

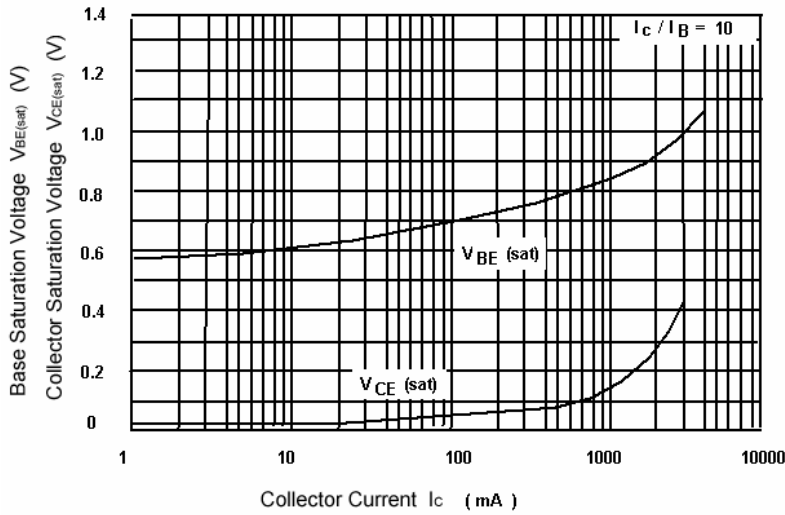


Fig.4 Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

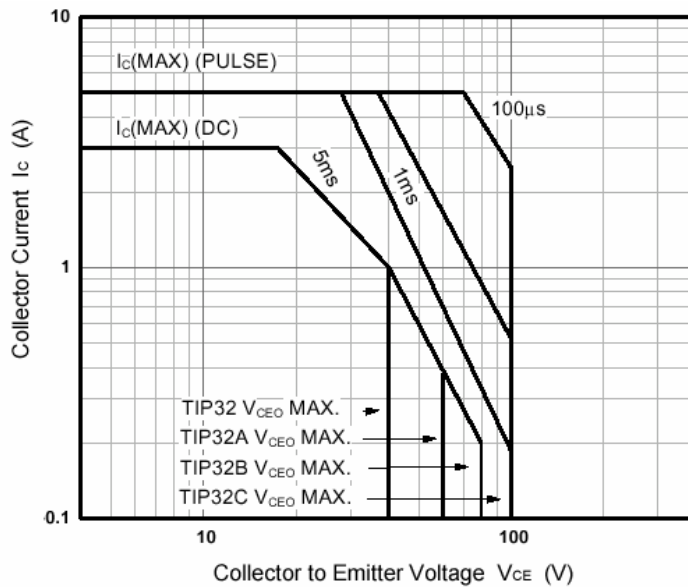


Fig.5 Safe Operating Area