Silicon NPN Power Transistors 2SC3296

DESCRIPTION

- With TO-220Fa package
- Wide area of safe operation
- Complement to type 2SA1304

APPLICATIONS

- Power amplifier applications
- Vertical output applications

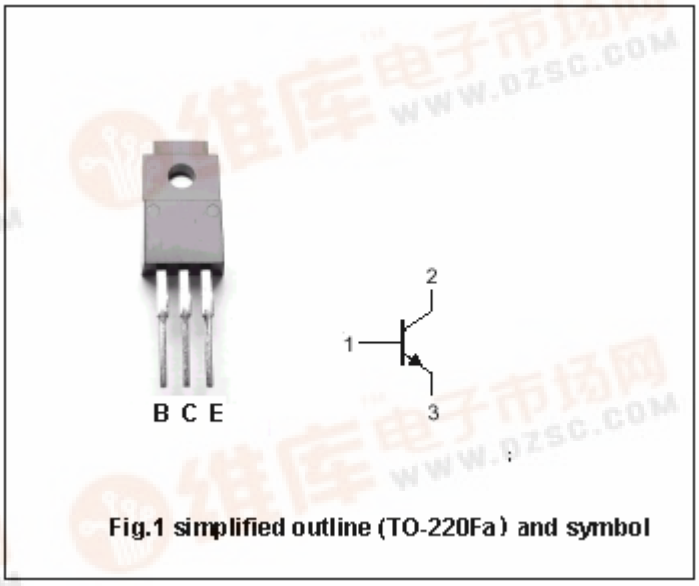

Fig.1 simplified outline (TO-220Fa) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		1.5	A
I_B	Base current		0.5	A
P_C	Collector power dissipation	T_a=25℃	2	W
		T_C=25℃	20	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA , I_B=0	150			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=0.5A ;I_B=50mA			1.5	V
V_{BE}	Base-emitter on voltage	I_C=0.5A ; V_{CE}=10V			0.85	V
I_{CBO}	Collector cut-off current	V_{CB}=120V; I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	μA
h_{FE}	DC current gain	I_C=0.5A ; V_{CE}=10V	40		140	
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz		35		pF
f_T	Transition frequency	I_C=0.5A ; V_{CE}=10V		4		MHz

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PACKAGE OUTLINE

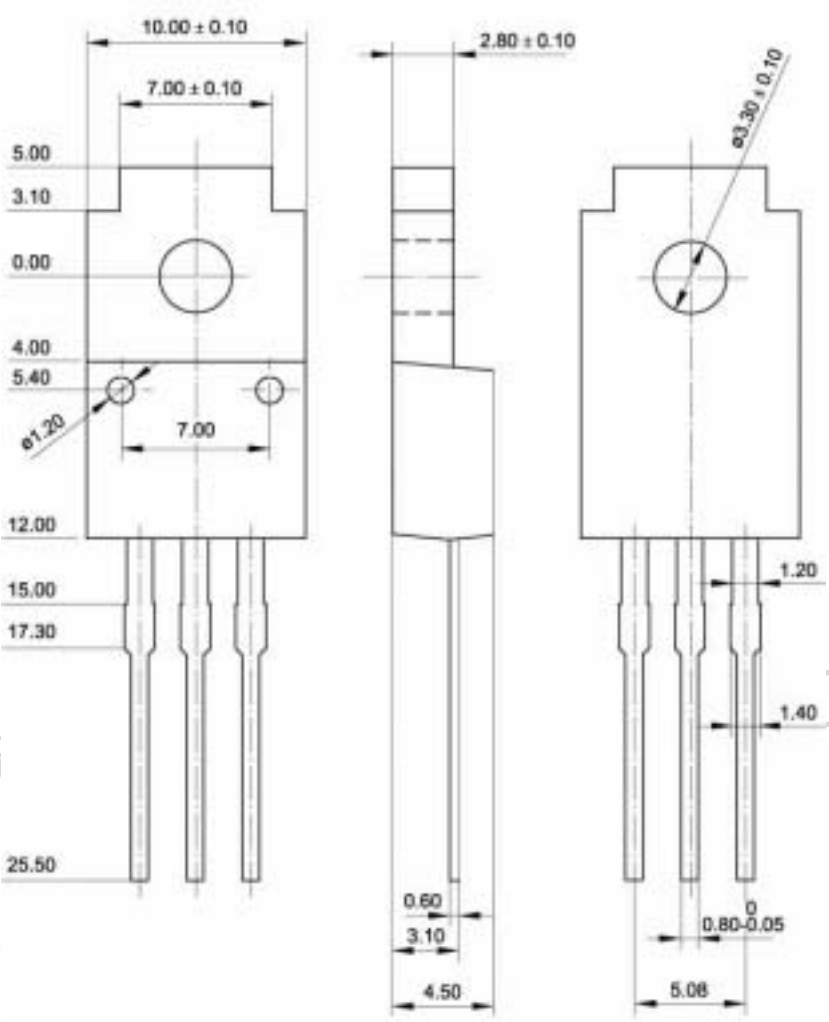

Fig.2 Outline dimensions (unindicated tolerance:±0.15 mm)

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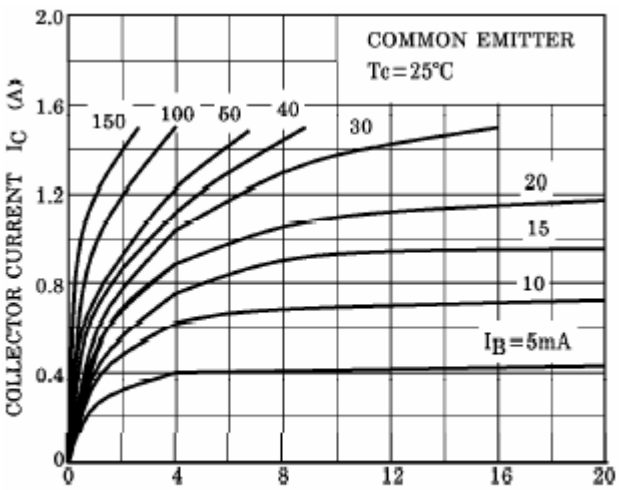

Fig.3 Static Characteristic

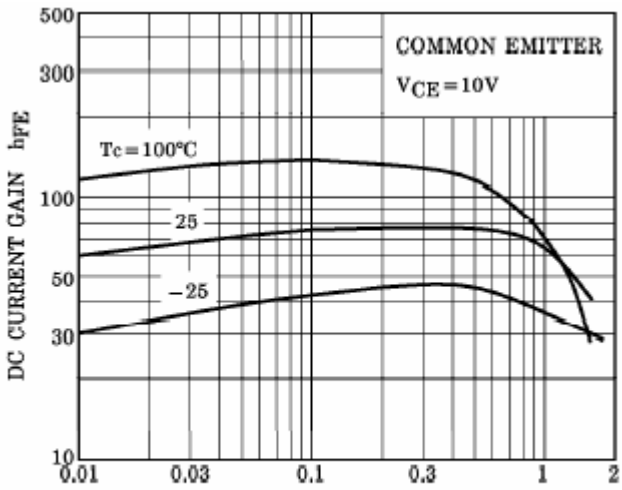

Fig.4 DC current Gain

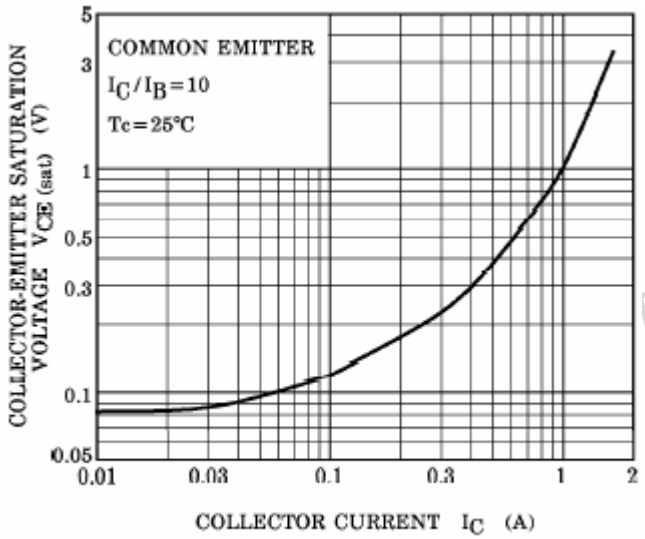

Fig.5 Collector-Emitter Saturation Voltage

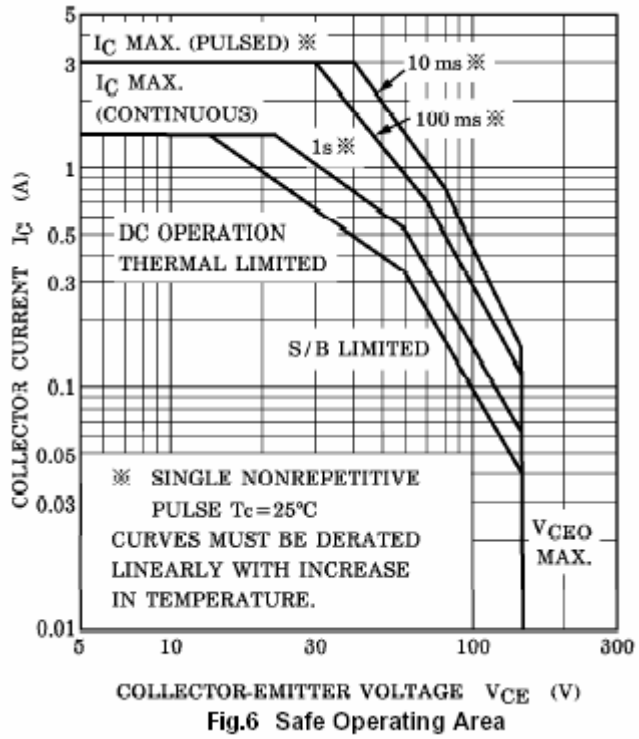

Fig.6 Safe Operating Area