

Silicon PNP Power Transistors

2SA1329

DESCRIPTION

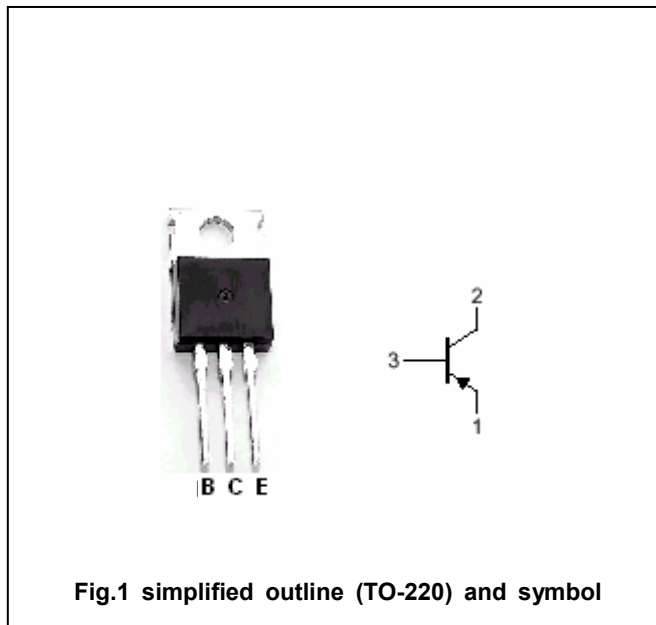
- With TO-220 package
- Complement to type 2SC3346
- Low collector saturation voltage
- High speed switching time

APPLICATIONS

- High current switching applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CB0}	Collector-base voltage	Open emitter	-80	V
V _{CEO}	Collector-emitter voltage	Open base	-80	V
V _{EBO}	Emitter-base voltage	Open collector	-6	V
I _C	Collector current		-12	A
I _B	Base current		-2	A
P _C	Collector power dissipation	T _C =25°C	40	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	$I_C = -50\text{mA}$, $I_B = 0$	-80			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -6\text{A}$; $I_B = -0.3\text{A}$		-0.2	-0.4	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = -6\text{A}$; $I_B = -0.3\text{A}$		-0.9	-1.2	V
I_{CBO}	Collector cut-off current	$V_{CB} = -80\text{V}$; $I_E = 0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -6\text{V}$; $I_C = 0$			-10	μA
h_{FE-1}	DC current gain	$I_C = -1\text{A}$; $V_{CE} = -1\text{V}$	70		240	
h_{FE-2}	DC current gain	$I_C = -6\text{A}$; $V_{CE} = -1\text{V}$	40			
C_{ob}	Output capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$; $f = 1\text{MHz}$		400		pF
f_T	Transition frequency	$I_C = -1\text{A}$; $V_{CE} = -5\text{V}$		50		MHz

Switching times

t_{on}	Turn-on time	$I_{B1} = -I_{B2} = -0.3\text{A}$ $R_L = 5\Omega$; $V_{CC} = -30\text{V}$		0.3		μs
t_s	Storage time			1.0		μs
t_f	Fall time			0.5		μs

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

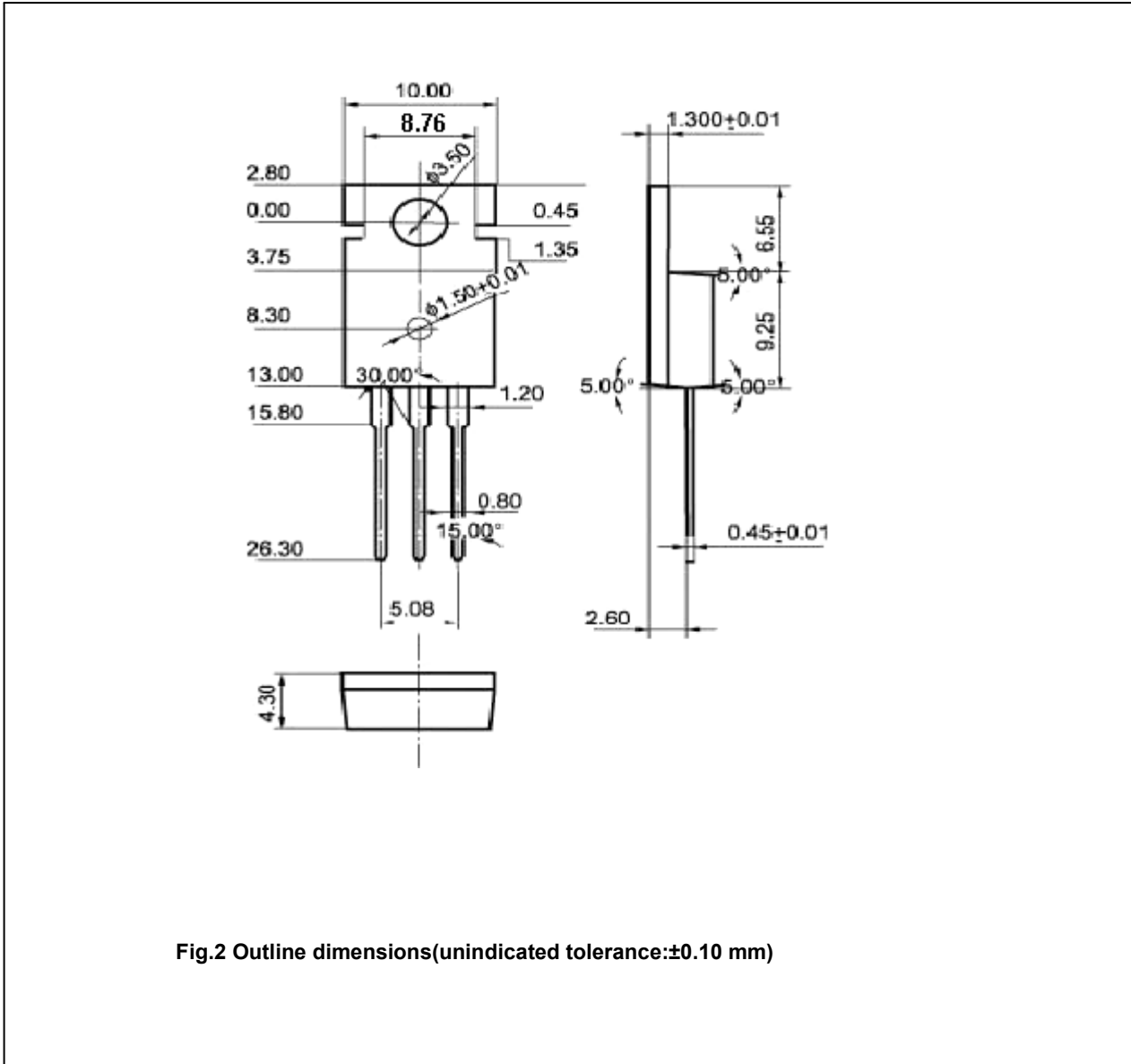


Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)

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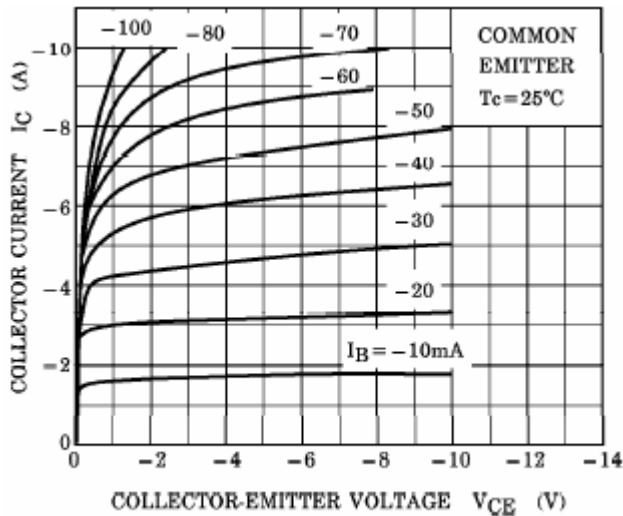


Fig.3 Static Characteristic

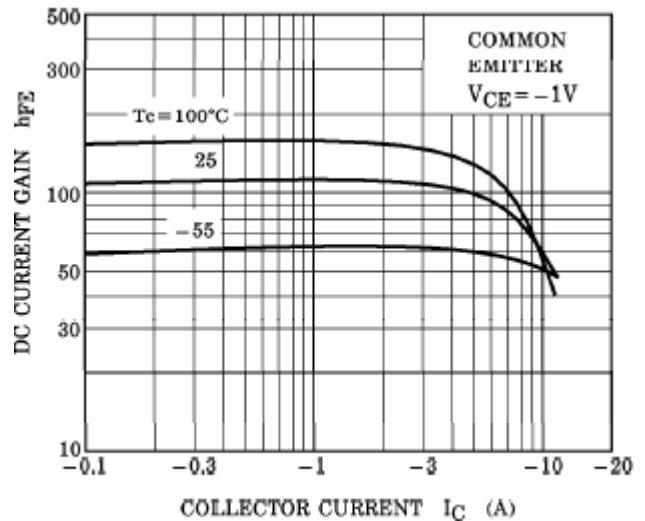


Fig.4 DC current Gain

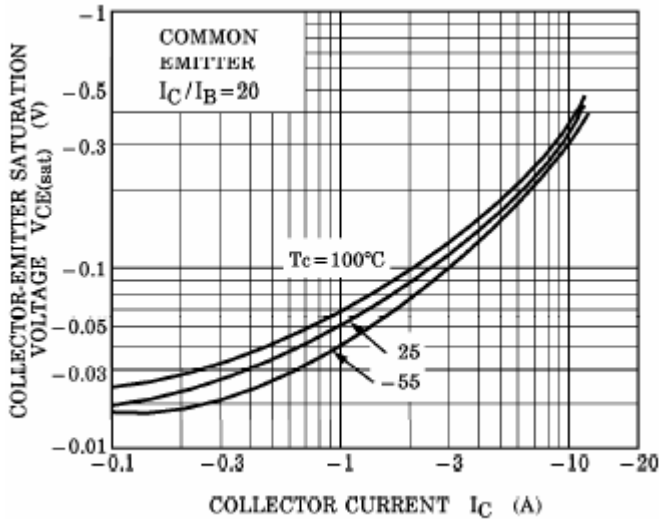


Fig.5 Collector-Emitter Saturation Voltage

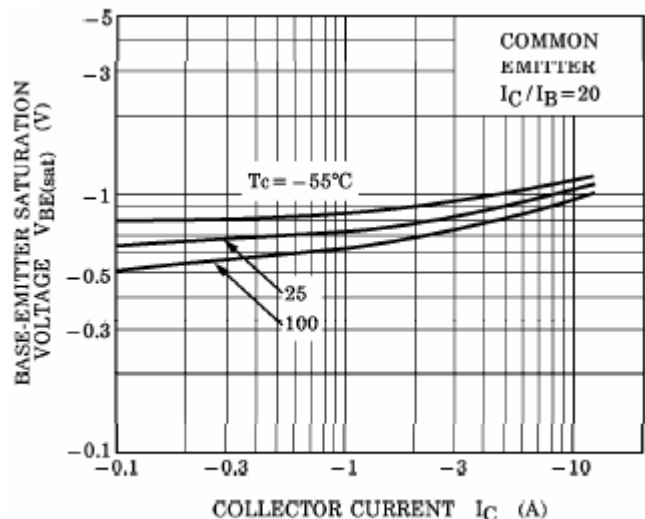


Fig.6 Base-Emitter Saturation Voltage

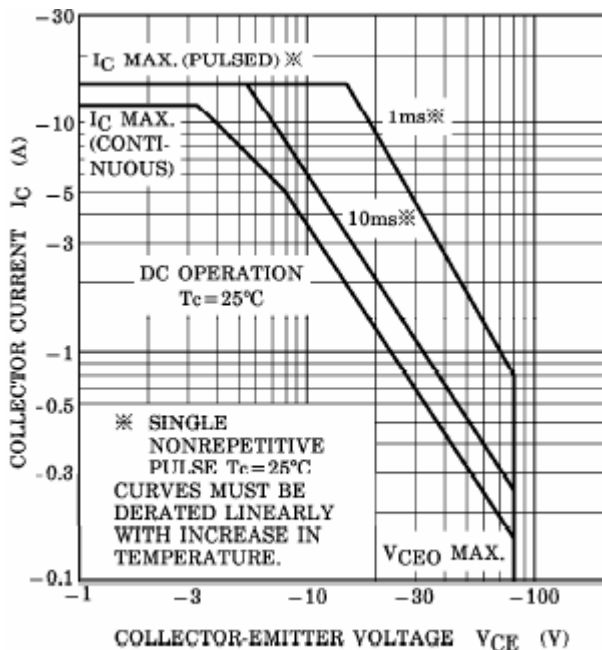


Fig.7 Safe Operating Area