

Silicon PNP Power Transistors

2SA1289

DESCRIPTION

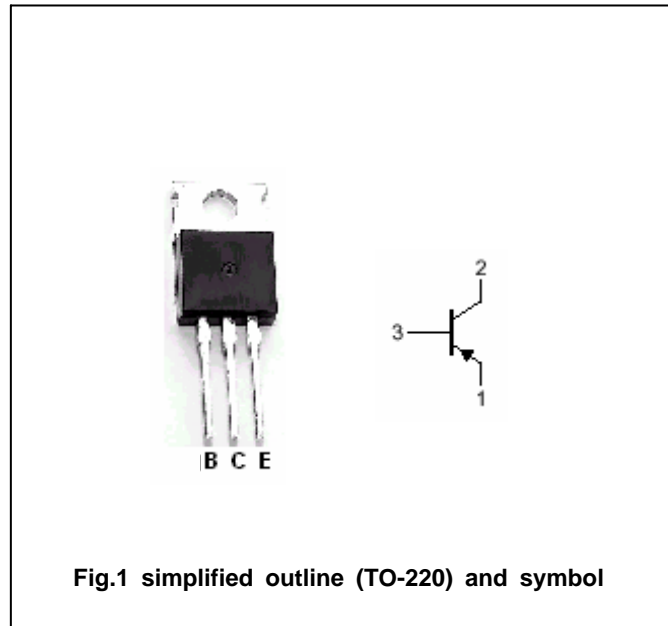
- With TO-220 package
- Complement to type 2SC3253
- Low saturation voltage
- Short switching time

APPLICATIONS

- Various inductance lamp drivers for electrical equipment
- Inverters;converters
- Power amplification
- Switching regulator ,driver

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_{CBO}	Collector-base voltage	Open emitter	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-5	A
I_{CM}	Collector current-Peak		-7	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	°C
T_{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-1mA, R _{BE} =∞	-60			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA; I _E =0	-80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2.5A; I _B =-0.125A			-0.4	V
I _{CBO}	Collector cut-off current	V _{CB} =-40V; I _E =0			-100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-100	μ A
h _{FE}	DC current gain	I _C =-1A; V _{CE} =-2V	70		280	
f _T	Transition frequency	I _C =-1A; V _{CE} =-5V		100		MHz

◆ h_{FE} Classifications

Q	R	S
70-140	100-200	140-280

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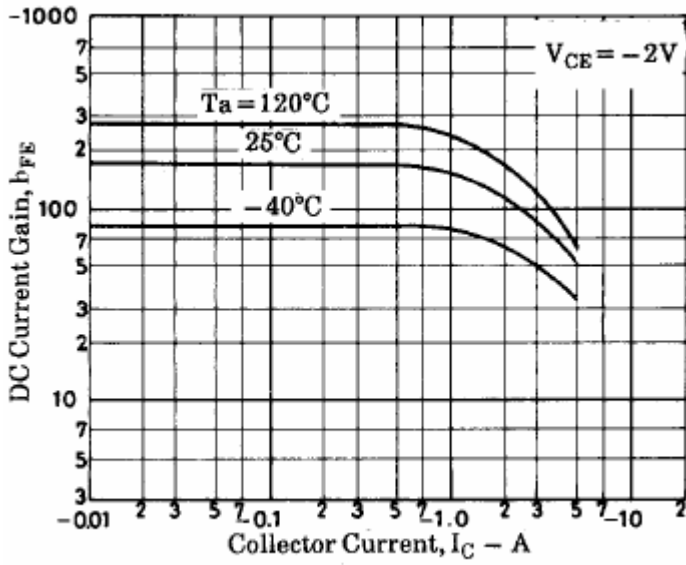


Fig.3 DC current Gain

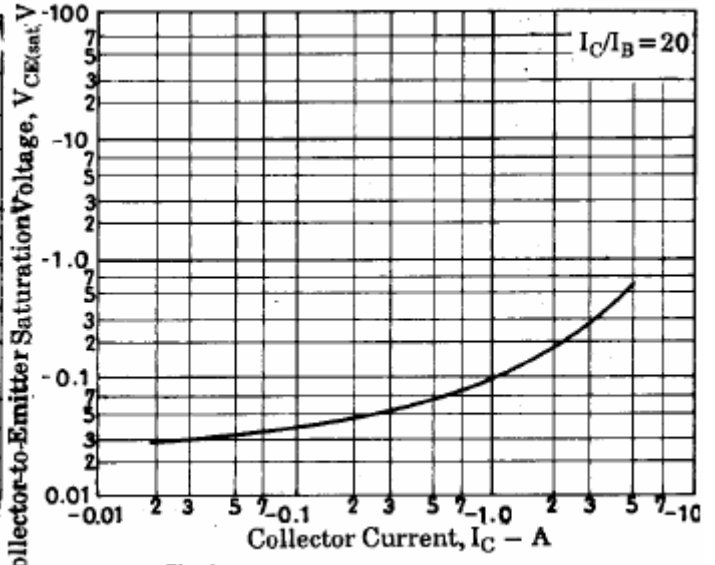


Fig.4 Collector-Emmitter Saturation Voltage

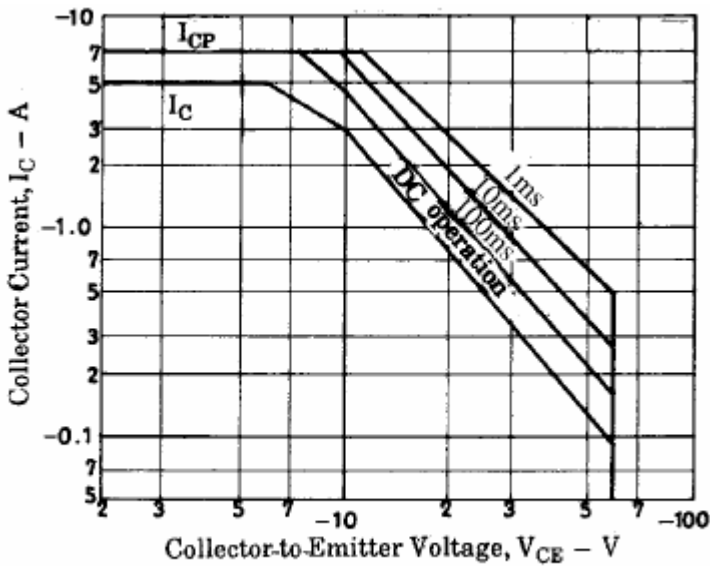


Fig.5 Safe Operating Area