Silicon PNP Power Transistors 2SA1291

DESCRIPTION

- With TO-220 package
- Low collector saturation voltage.
- Short switching time.
- Complement to type 2SC3255

APPLICATIONS

- Various inductance lamp drivers for electrical equipment.
- Inverters, converters
- Power amplifier
- High-speed switching

PINNING

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

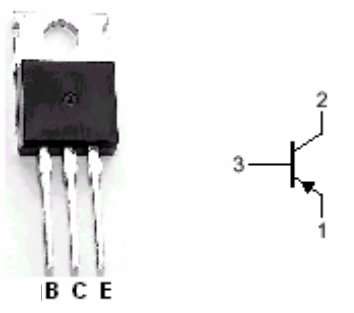


Fig.1 simplified outline (TO-220) and symbol

ABSOLUTE MAXIMUM RATINGS (T_C=25℃)

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		-10	A
I_{CM}	Collector current-peak		-12	A
P_C	Collector power dissipation	T_C=25℃	40	W
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
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-1mA ,I_E=0	-80			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=-1mA ,I_B=0	-60			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-1mA ,I_C=0	-5			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=-5A; I_B=-0.25A			-0.4	V
I_{CBO}	Collector cut-off current	V_{CB}=-40V; I_E=0			-100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-4V; I_C=0			-100	μA
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

Switching times

t_{on}	Turn-on time	I_C=5A I_{B1}=- I_{B2}=0.25A V_{CC}=20V;R_L=6.67Ω		0.1		μs
t_s	Storage time			0.5		μs
t_f	Fall time			0.1		μs

h_{FE} Classifications

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

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PACKAGE OUTLINE

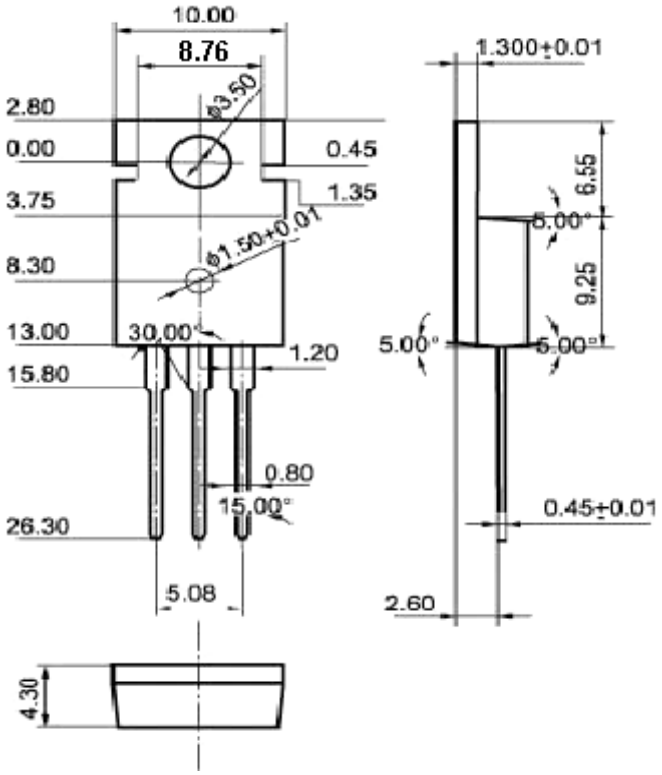


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)