

Silicon NPN Power Transistors

2SC2981

DESCRIPTION

- With TO-3 package
- High voltatge
- High speed

APPLICATIONS

- For high voltatge ,high speed and power switching applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

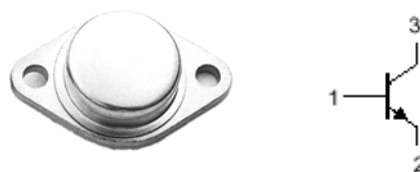


Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS($T_C=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	900	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		8	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	100	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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CHARACTERISTICS

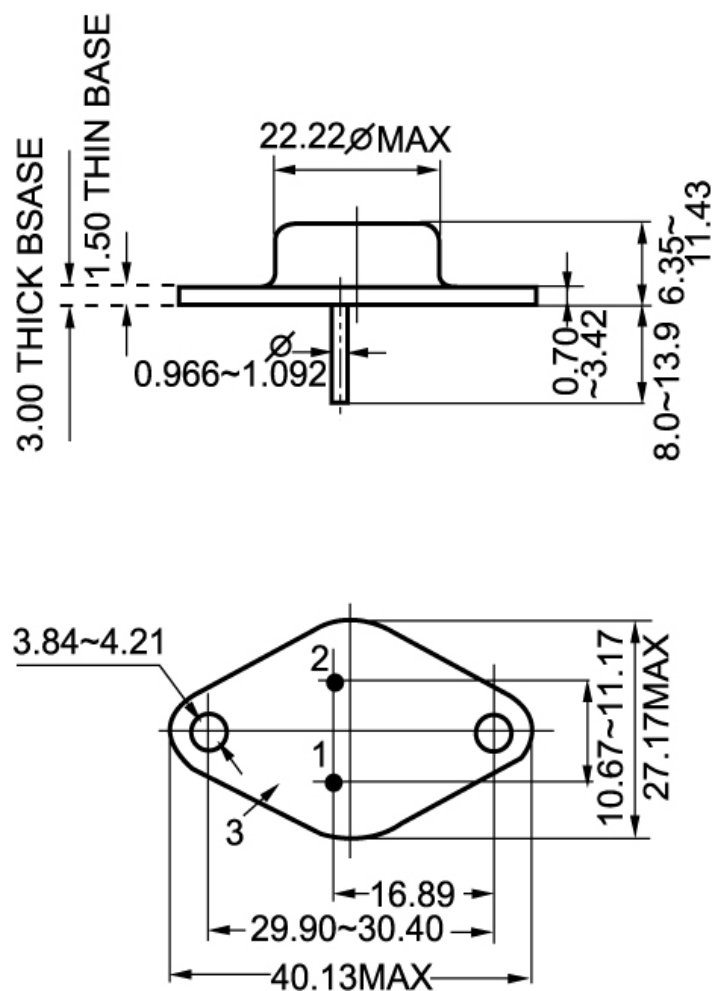
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =5mA ; R _{BE} =∞	800			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	900			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =2.5A ; I _B =0.5A			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =2.5A ; I _B =0.5A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =750V ; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			0.1	mA
h _{FE-1}	DC current gain	I _C =0.8A ; V _{CE} =5V	15			
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =5V	10			

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)