

Silicon NPN Power Transistors

2SC2981

DESCRIPTION

- With TO-3 package
- High voltage
- High speed

APPLICATIONS

- For high voltage ,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

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=5mA$; $R_{BE}=\infty$	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

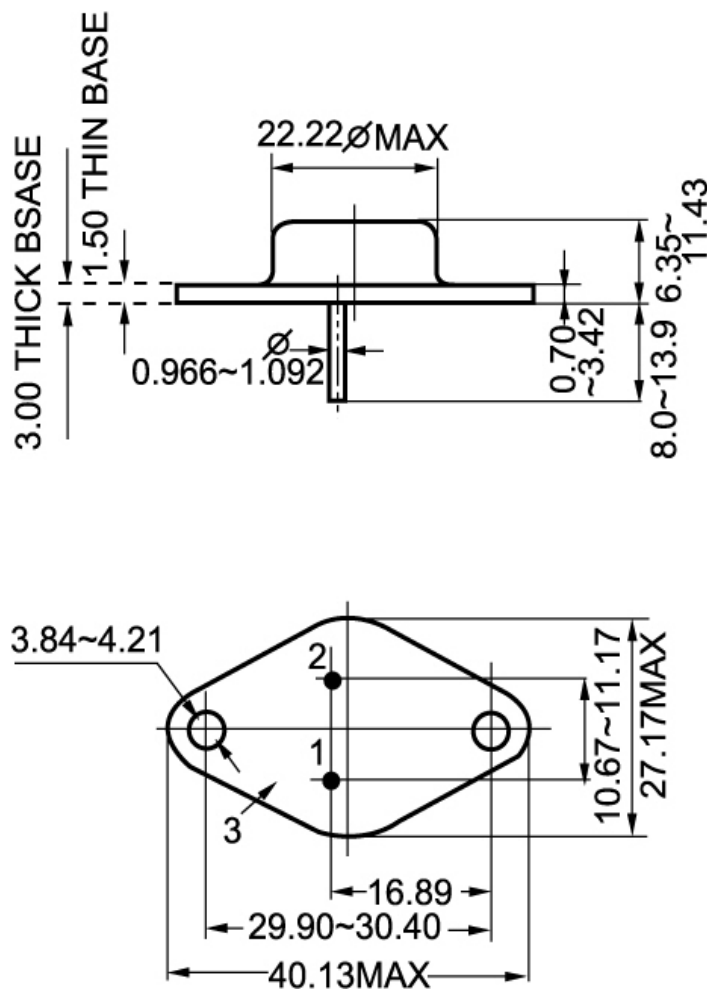


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)