

Silicon NPN Power Transistors

2SC2928

DESCRIPTION

- With TO-3 package
- High breakdown voltage

APPLICATIONS

- For high voltage,high speed and high power switching applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

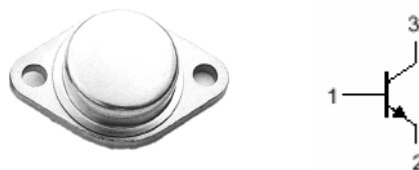


Fig.1 simplified outline (TO-3) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		5	A
I_{CM}	Collector current-peak		7	A
I_B	Base current		2.5	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-45~150	$^\circ\text{C}$

Silicon NPN Power Transistors

2SC2928

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=0.2A$; $R_{BE}=\infty$	800			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA$; $I_C=0$	7			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=1.5A$; $I_B=0.3A$			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=1.5A$; $I_B=0.3A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=1200V$; $I_E=0$			100	μA
I_{CEO}	Collector cut-off current	$V_{CE}=650V$; $R_{BE}=\infty$			100	μA
h_{FE-1}	DC current gain	$I_C=0.5A$; $V_{CE}=5V$	15			
h_{FE-2}	DC current gain	$I_C=3A$; $V_{CE}=5V$	7			

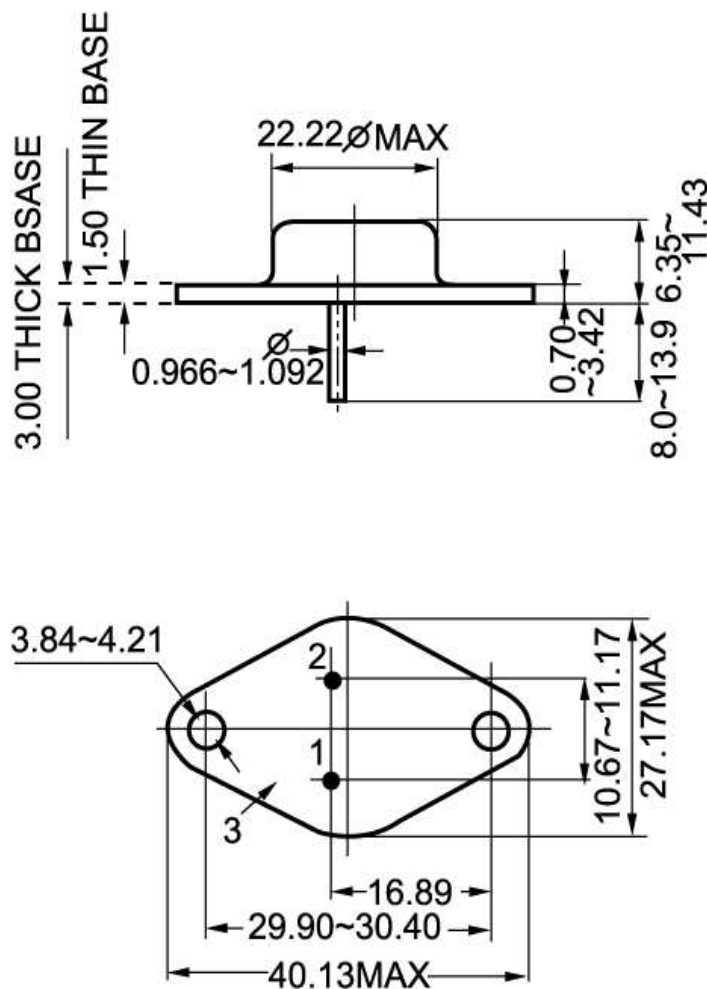
Switching times

t_{on}	Turn-on time	$I_C=3.0A$; $V_{CC}=250V$ $I_{B1}=0.6A$, $I_{B2}=-1.5A$			1.0	μs
t_s	Storage time				3.0	μs
t_f	Fall time				1.0	μs

Silicon NPN Power Transistors

2SC2928

PACKAGE OUTLINE

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