

Silicon NPN Power Transistors

2SC2928

DESCRIPTION

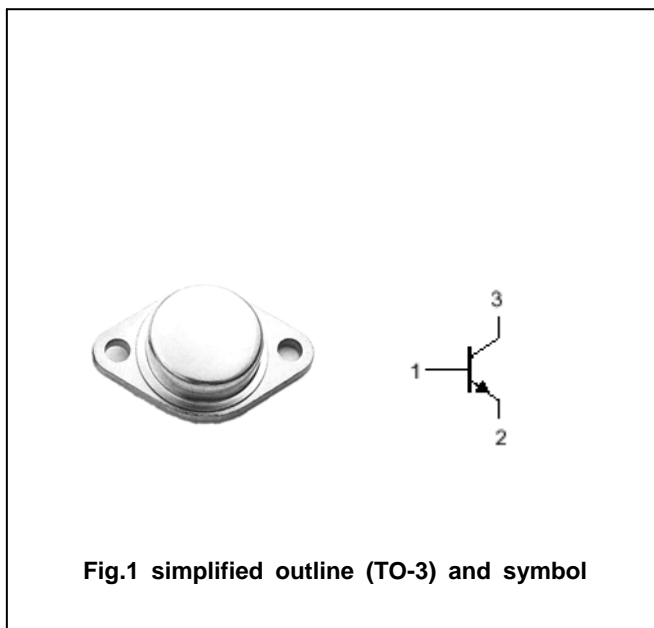
- With TO-3 package
- High breakdown voltage

APPLICATIONS

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

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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	$^\circ\text{C}$

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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 =0.2A ; R _{BE} =∞	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	μ A
I _{CEO}	Collector cut-off current	V _{CE} =650V ; R _{BE} =∞			100	μ A
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	μ s
t _s	Storage time				3.0	μ s
t _f	Fall time				1.0	μ s

PACKAGE OUTLINE

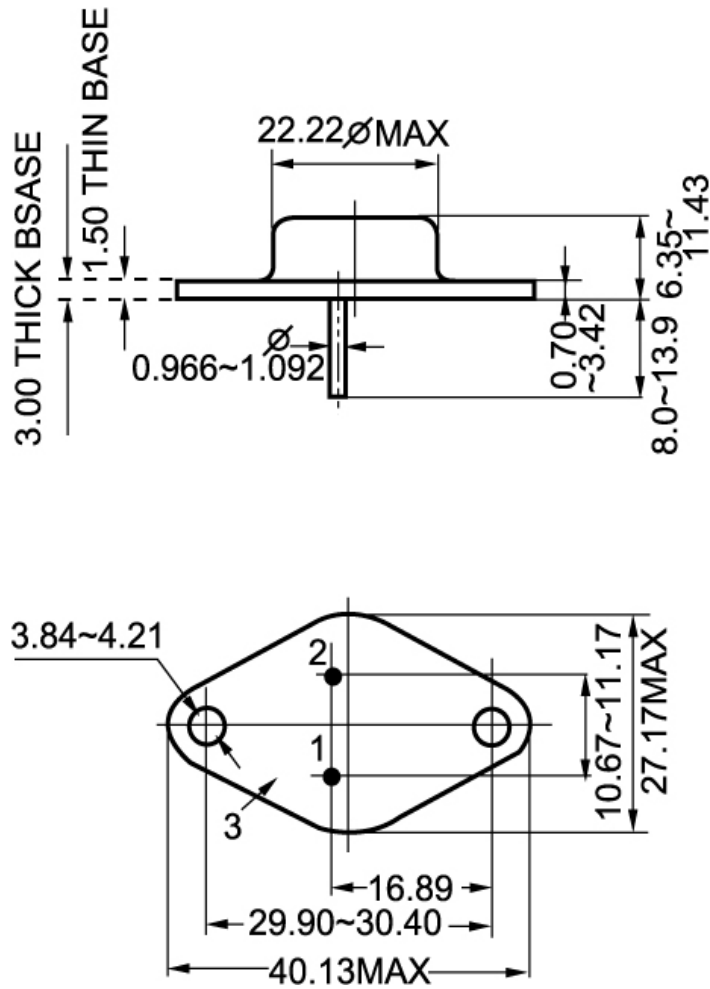


Fig.2 outline dimensions (unindicated tolerance: ± 0.1 mm)