

Silicon NPN Power Transistors

2SC2791

DESCRIPTION

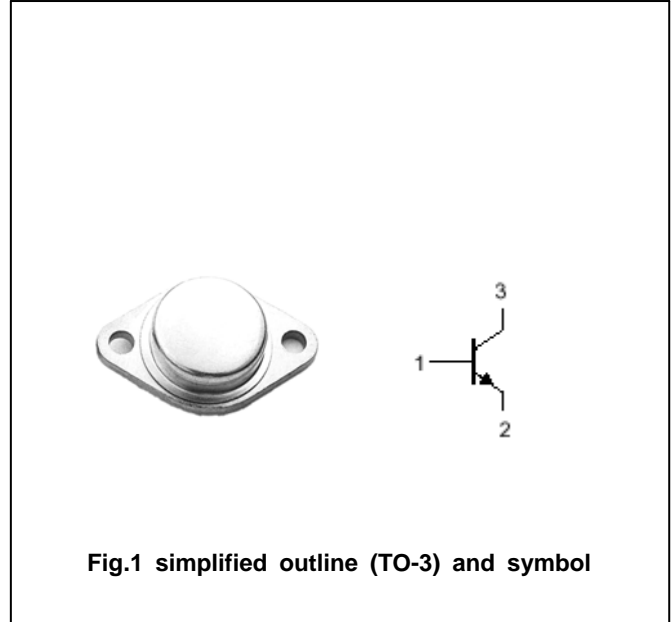
- With TO-3 package
- High collector breakdown voltage
- Excellent switching times

APPLICATIONS

- High speed and high voltage switching
- Switching regulator
- High speed DC-DC converter

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	900	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_B	Base current		3	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 =10mA ; I _B =0	800			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	900			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =3A; I _B =0.6A			1.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =3A; I _B =0.6A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =800V; I _E =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			1	mA
h _{FE-1}	DC current gain	I _C =10mA ; V _{CE} =5V	10			
h _{FE-2}	DC current gain	I _C =3A ; V _{CE} =5V	10			

Switching times

t _r	Rise time	V _{CC} =400V , I _C =3A, I _{B1} =0.3A; I _{B2} =-0.8A			1.0	μ s
t _{stg}	Storage time				3.5	μ s
t _f	Fall time				1.0	μ s

PACKAGE OUTLINE

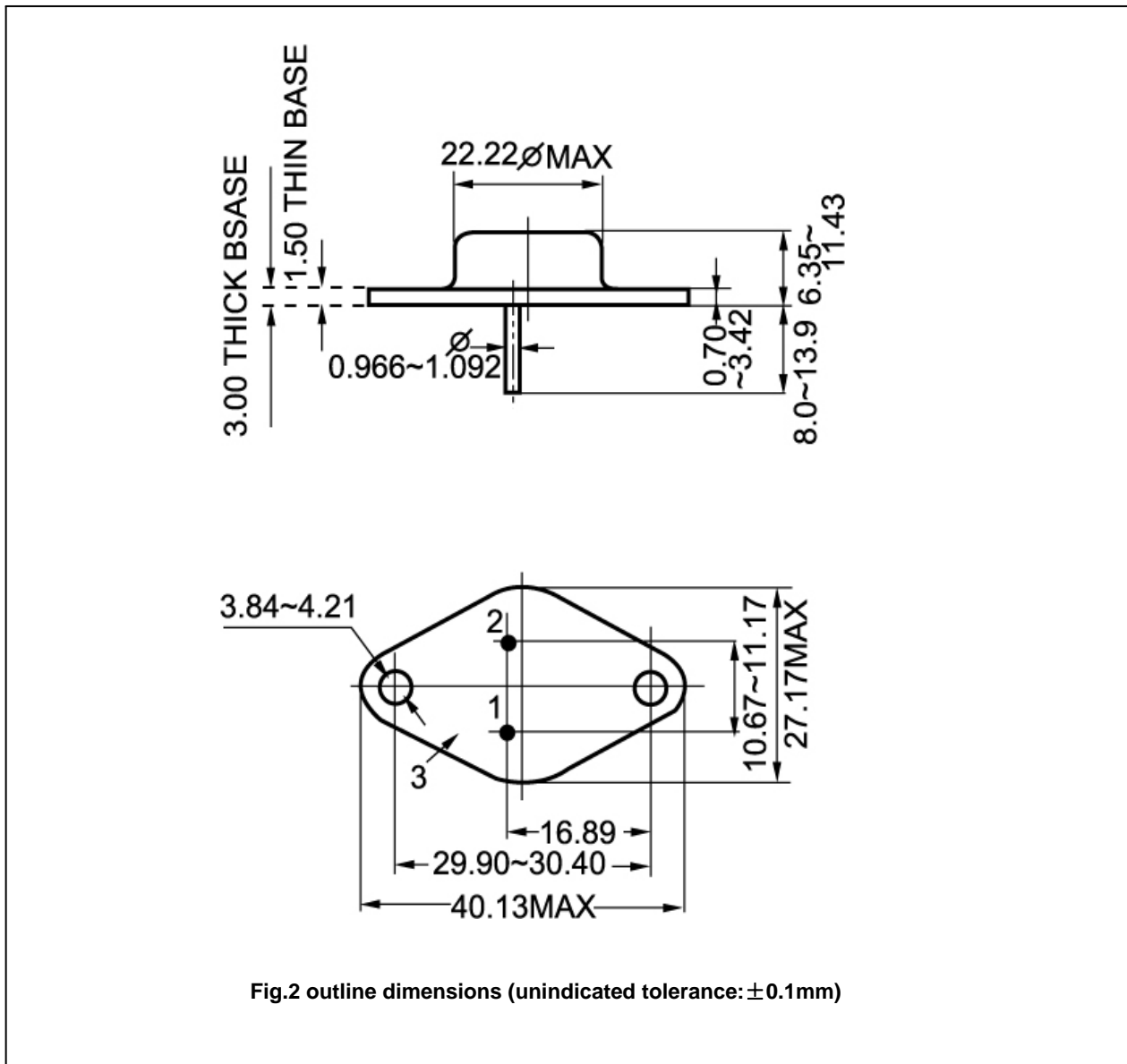


Fig.2 outline dimensions (unindicated tolerance: ± 0.1 mm)