

Silicon PNP Power Transistors

2SB922

DESCRIPTION

- With TO-3PN package
- Complement to type 2SD1238
- Wide area of safe operation
- Low collector saturation voltage :
 $V_{CE(sat)} = -0.5V$ max.

APPLICATIONS

- Suitable for relay drivers,high-speed
 Inverters, converters,and other large-
 current switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

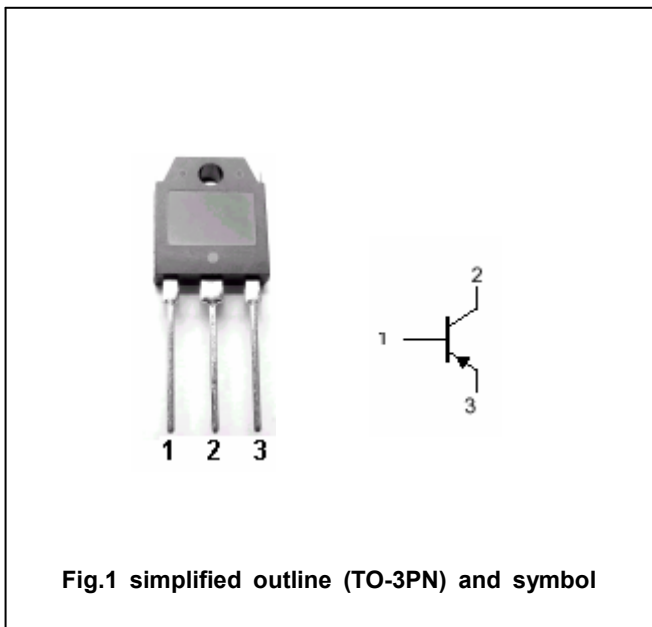


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Tc=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector-emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current (DC)		-12	A
I_{CM}	Collector current (Pulse)		-20	A
P_C	Collector power dissipation	$T_c=25^\circ C$	80	W
T_j	Junction temperature		150	°C
T_{stg}	Storage temperature		-55~150	°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 =-1mA ; R _{BE} =∞	-120			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA ; I _E =0	-120			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA ; I _C =0	-6			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-6A , I _B =-0.6A			-0.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V, I _E =0			-0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-4V; I _C =0			-0.1	mA
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-2V	70		280	
h _{FE-2}	DC current gain	I _C =-6A ; V _{CE} =-2V	30			
f _T	Transition frequency	I _C =-1A ; V _{CE} =-5V		20		MHz

Switching times

t _{on}	Turn-on time	I _C =-5.0A; I _{B1} =-I _{B2} =-0.5A V _{CC} =50V; R _L =10Ω		0.2		μs
t _{stg}	Storage time			0.7		μs
t _f	Fall time			0.1		μs

◆ h_{FE-1} Classifications

Q	R	S
70-140	100-200	140-280

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PACKAGE OUTLINE

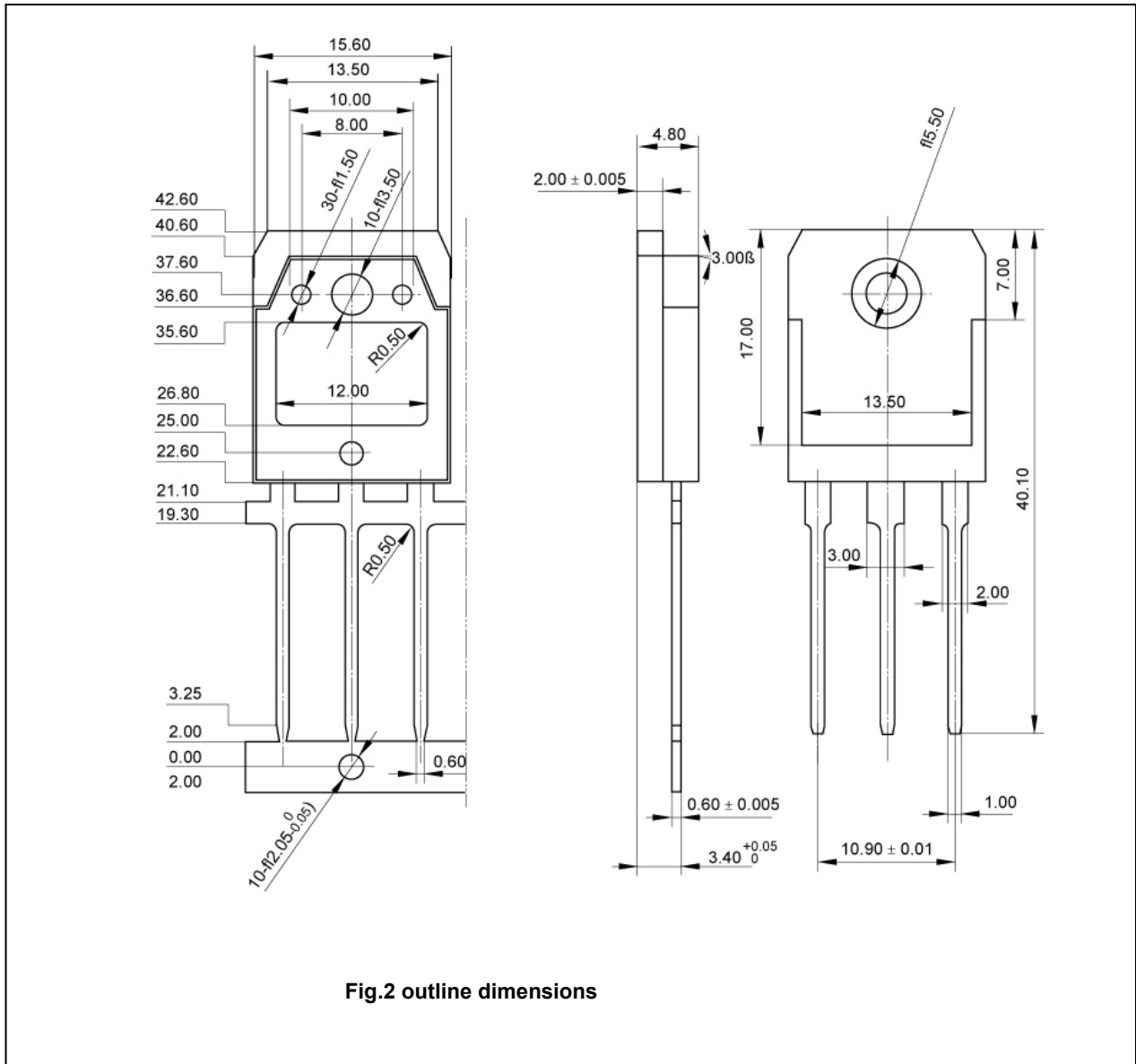


Fig.2 outline dimensions