

Silicon PNP Power Transistors

2SB1230

DESCRIPTION

- With TO-3PN package
- Wide area of safe operation
- Complement to type 2SD1840
- Low collector saturation voltage

APPLICATIONS

- Motor drivers, relay drivers, converters and other general high-current switching applications

PINNING

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

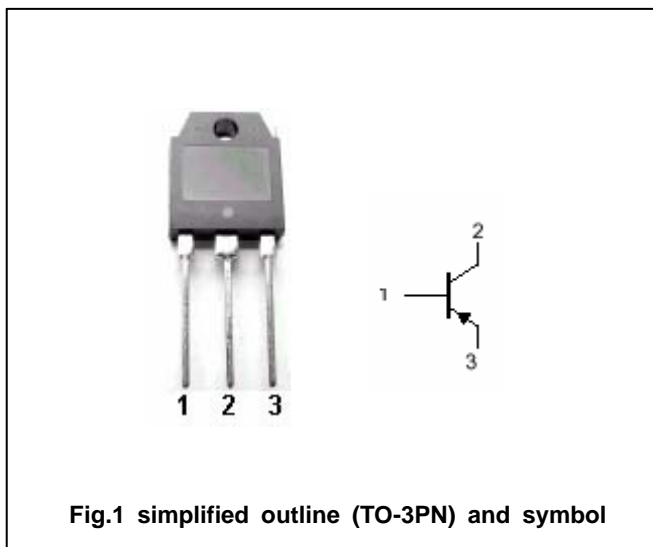


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Tc=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-110	V
V_{CEO}	Collector-emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-15	A
I_{CM}	Collector current -peak		-25	A
I_B	Base current		-5	A
P_C	Collector power dissipation	$T_a=25$	3.0	W
		$T_C=25$	100	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-5mA; R _{BE} =	-100			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA; I _E =0	-110			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			-0.8	V
V _{BE sat}	Base-emitter saturation voltage	I _C =-6A; I _B =-0.6A			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V; I _E =0			-100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-100	μA
h _{FE-1}	DC current gain	I _C =-1.5A; V _{CE} =-2V	50		140	
h _{FE-2}	DC current gain	I _C =-6A; V _{CE} =-2V	20			

◆ h_{FE-1} Classifications

P	Q
50-100	70-140

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PACKAGE OUTLINE

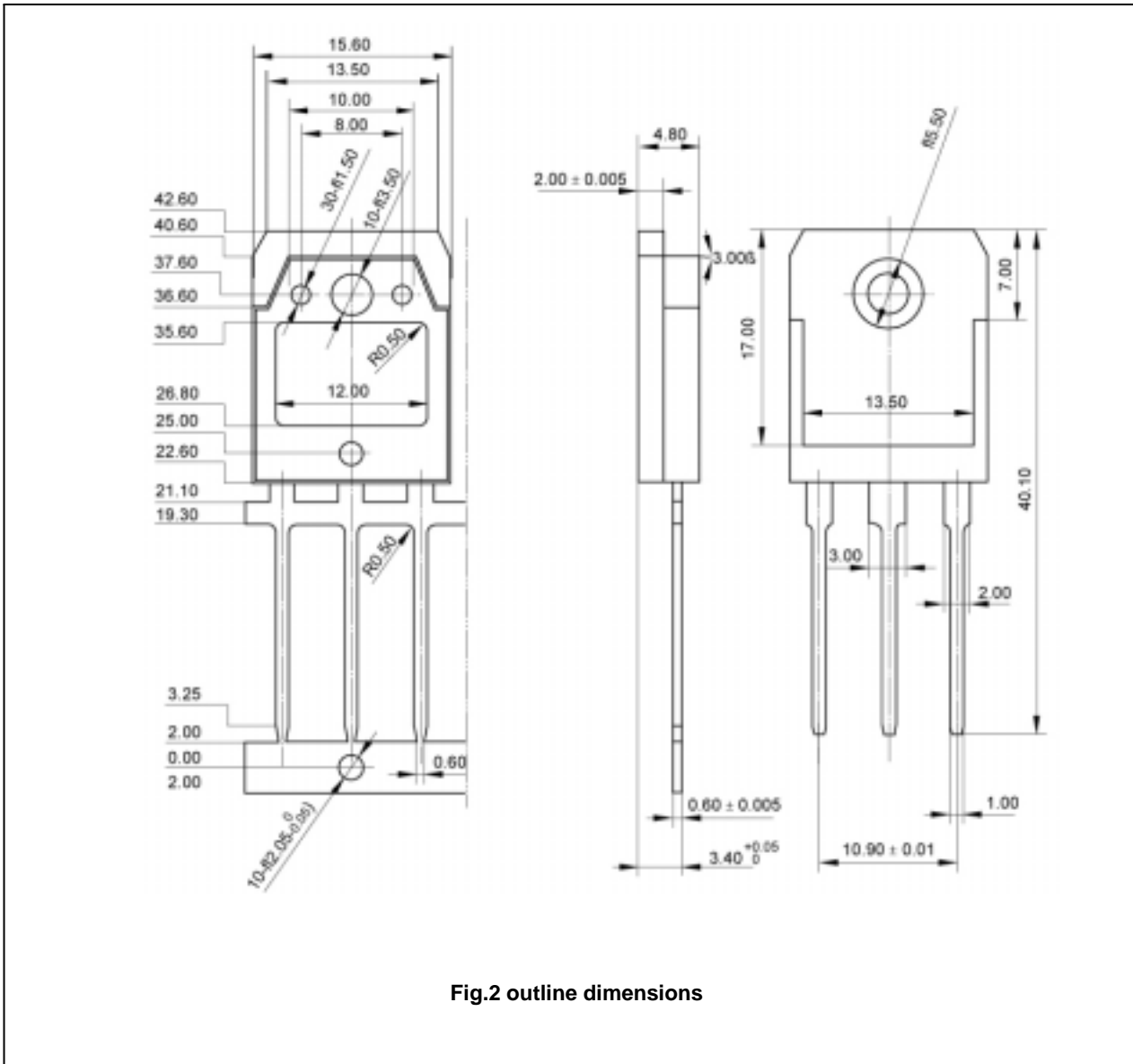


Fig.2 outline dimensions