

Silicon PNP Power Transistors

2SB1023

DESCRIPTION

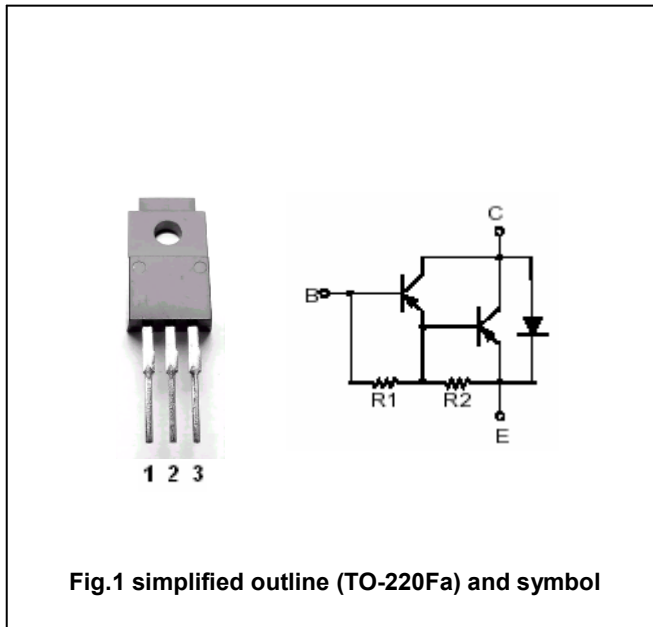
- With TO-220Fa package
- High DC current gain
- Low saturation voltage
- Complement to type 2SD1413

APPLICATIONS

- Power amplifier and switching applications
- Hammer drive,pulse motor drive applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-60	V
V _{CEO}	Collector -emitter voltage	Open base	-40	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-3	A
I _B	Base current		-0.5	A
P _C	Collector power dissipation	T _C =25°C	20	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 =-25mA; I _B =0	-40			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2A ; I _B =-4mA			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-2A ; I _B =-4mA			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-60V; I _E =0			-20	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-2.5	mA
h _{FE-1}	DC current gain	I _C =-1A ; V _{CE} =-2V	2000			
h _{FE-2}	DC current gain	I _C =-3A ; V _{CE} =-2V	1000			

Switching times

t _{on}	Turn-on time	I _{B1} =-I _{B2} =-6mA V _{CC} =-30V ,R _L =10Ω		0.30		μs
t _{stg}	Storage time			0.60		μs
t _f	Fall time			0.25		μs

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PACKAGE OUTLINE

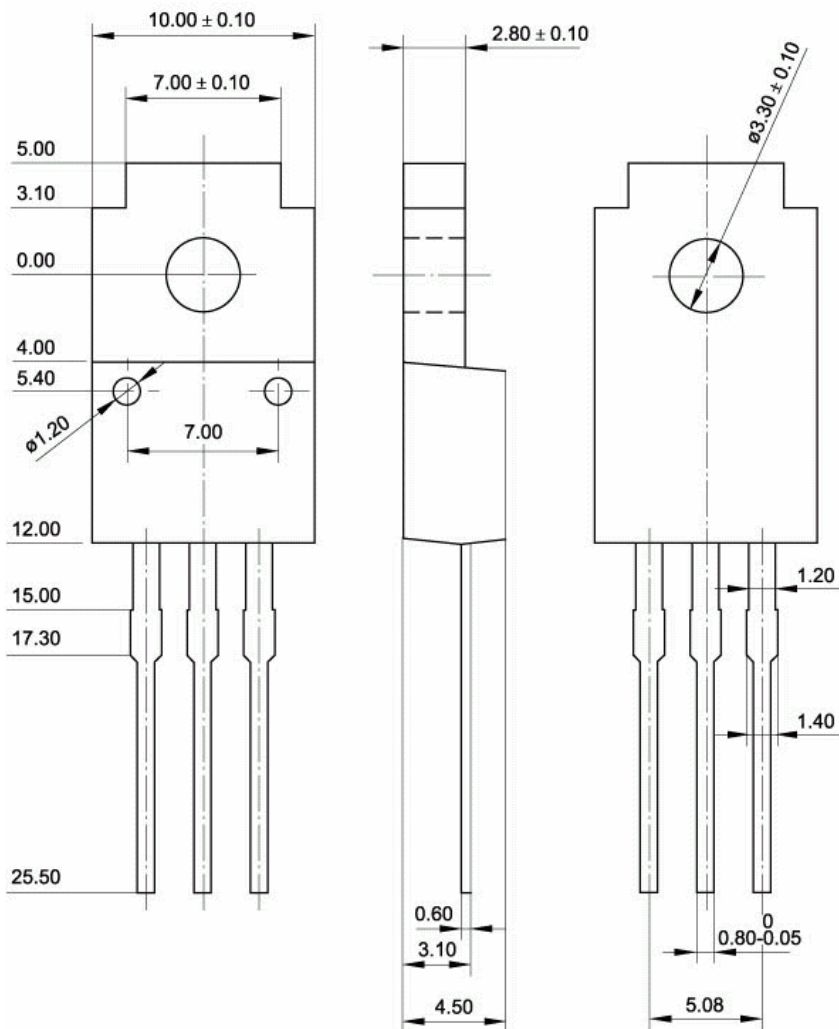


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)