Silicon PNP Power Transistors 2SB1023

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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

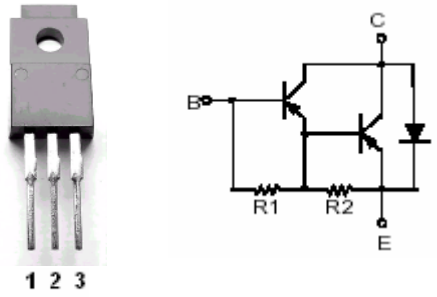

Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25□)

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□	20	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

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CHARACTERISTICS

Tj=25□ 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

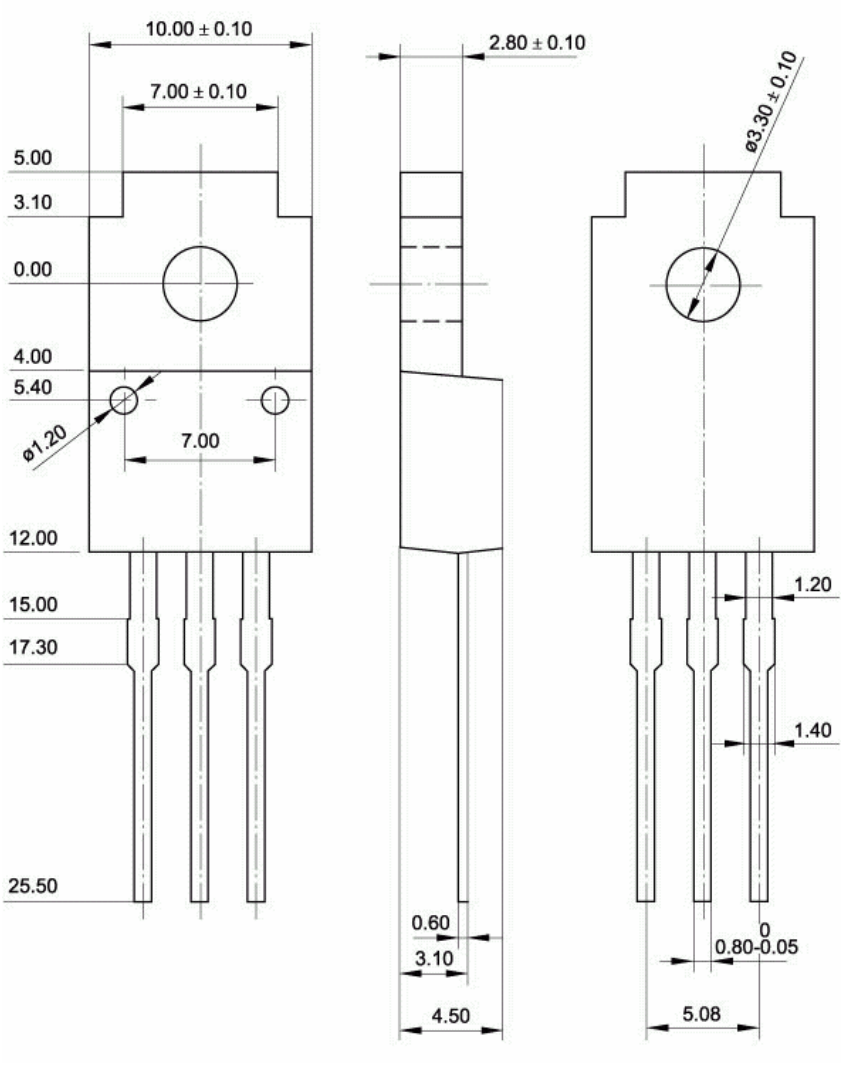

Fig.2 Outline dimensions (unindicated tolerance: ±0.15 mm)

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