

Silicon PNP Power Transistors

2SA1640

DESCRIPTION

- With TO-220F package
- Low collector saturation voltage
- Good linearity of h_{FE}

APPLICATIONS

- For switching regulator ,driver and power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

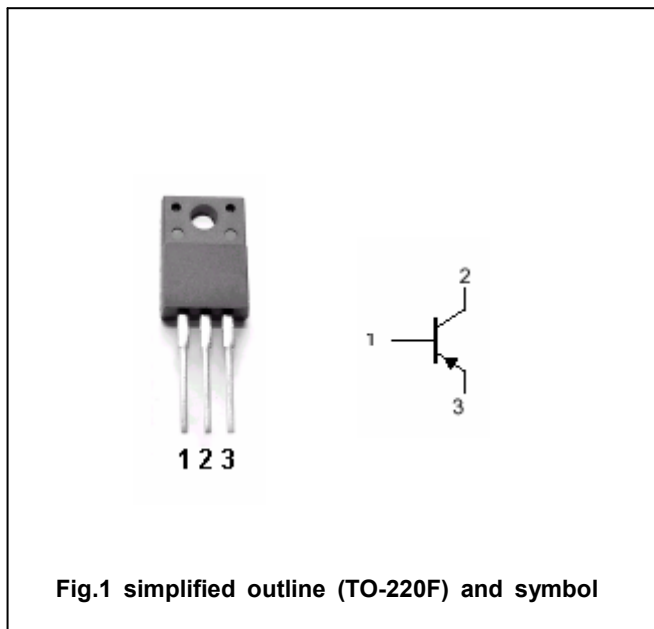


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-30	V
V_{CEO}	Collector-emitter voltage	Open base	-30	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-7	A
I_B	Base current		-10	A
P_C	Collector dissipation	$T_C=25^\circ C$	40	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 =-10mA ; I _B =0	-30			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-1mA ; I _E =0	-30			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1mA ; I _C =0	-5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A ; I _B =-0.1A			-0.4	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A ; I _B =-0.1A			-1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-30V ; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V ; I _C =0			-10	μA
h _{FE}	DC current gain	I _C =-0.2A ; V _{CE} =-2V	100		300	
f _T	Transition frequency	I _C =-0.5A ; V _{CE} =-10V	20			MHz

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PACKAGE OUTLINE

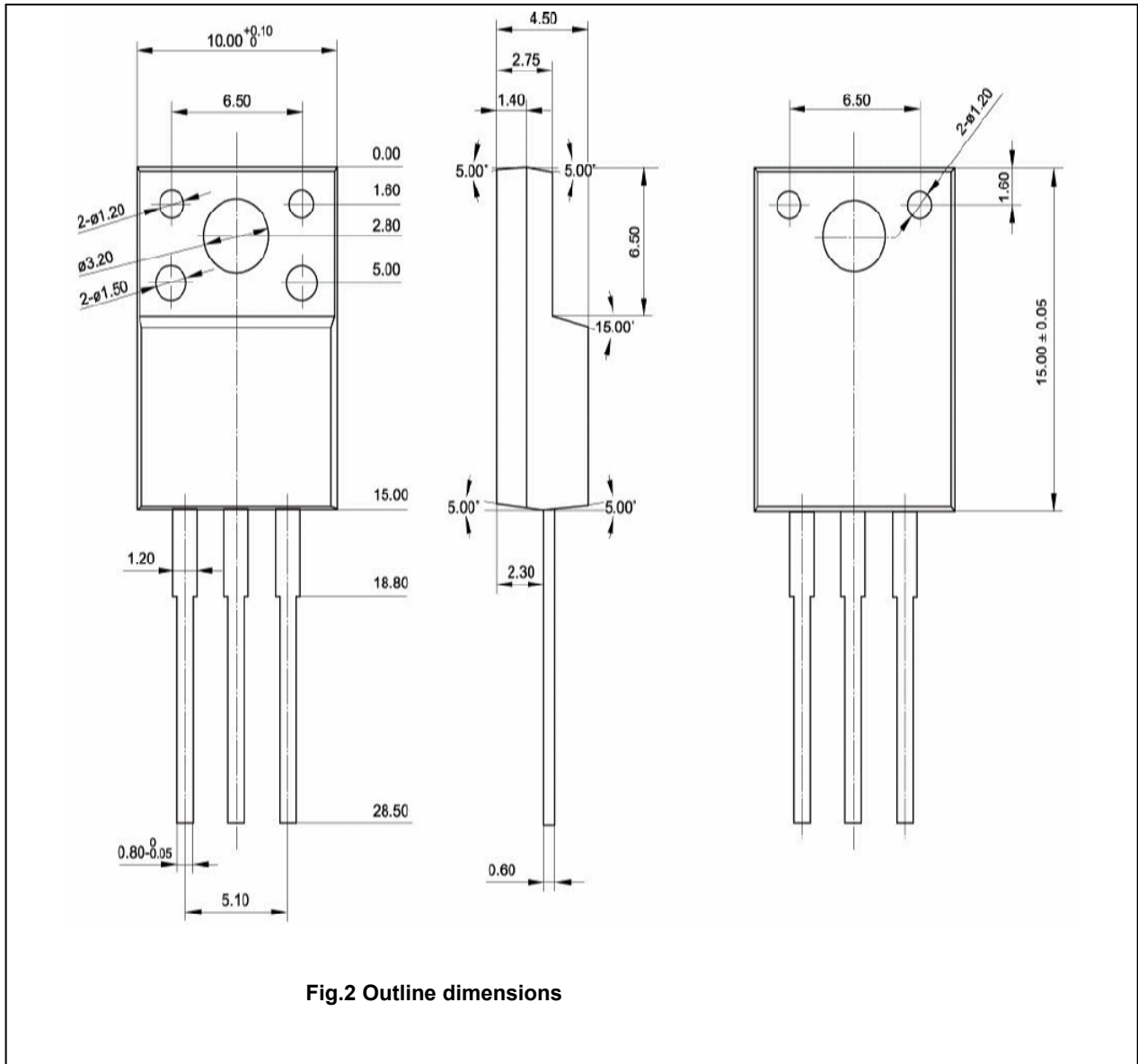


Fig.2 Outline dimensions