

Silicon NPN Power Transistors

2SC3569

DESCRIPTION

- With TO-220F package
- Low collector saturation voltage

APPLICATIONS

- High speed switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

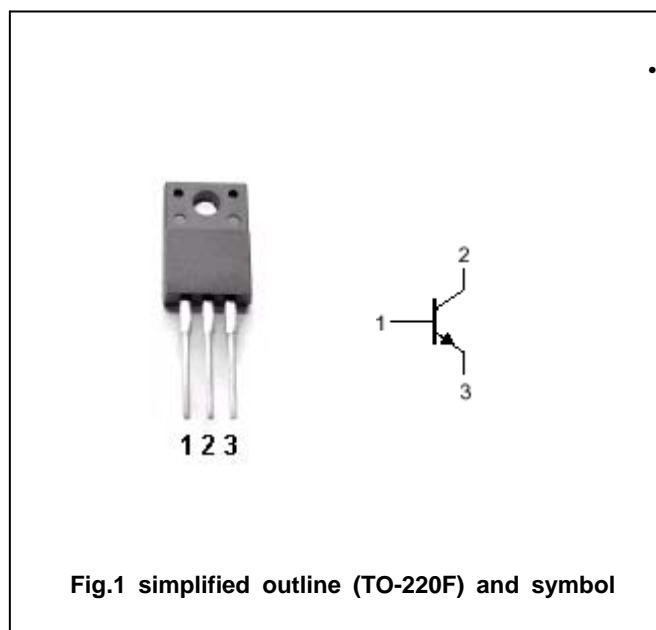


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		2	A
I_{CM}	Collector current-peak		4	A
I_B	Base current		1	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	15	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =0.5A; I _B =0.1A; L=1mH	400			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =0.5 A; I _B =0.1A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =0.5 A; I _B =0.1A			1.2	V
I _{CBO}	Collector cut-off current	V _{CB} =400V; I _E =0			10	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			10	μ A
h _{FE-1}	DC current gain	I _C =0.1A ; V _{CE} =5V	20		80	
h _{FE-2}	DC current gain	I _C =0.5A ; V _{CE} =5V	10			

Switching times

t _{on}	Turn-on time	I _C =0.5A; R _L =300 Ω I _{B1} =- I _{B2} =0.1A V _{CC} =150V			1.0	μ s
t _s	Storage time				2.5	μ s
t _f	Fall time				1.0	μ s

◆ h_{FE-1} classifications

R	O	Y
20-40	30-60	40-80

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PACKAGE OUTLINE

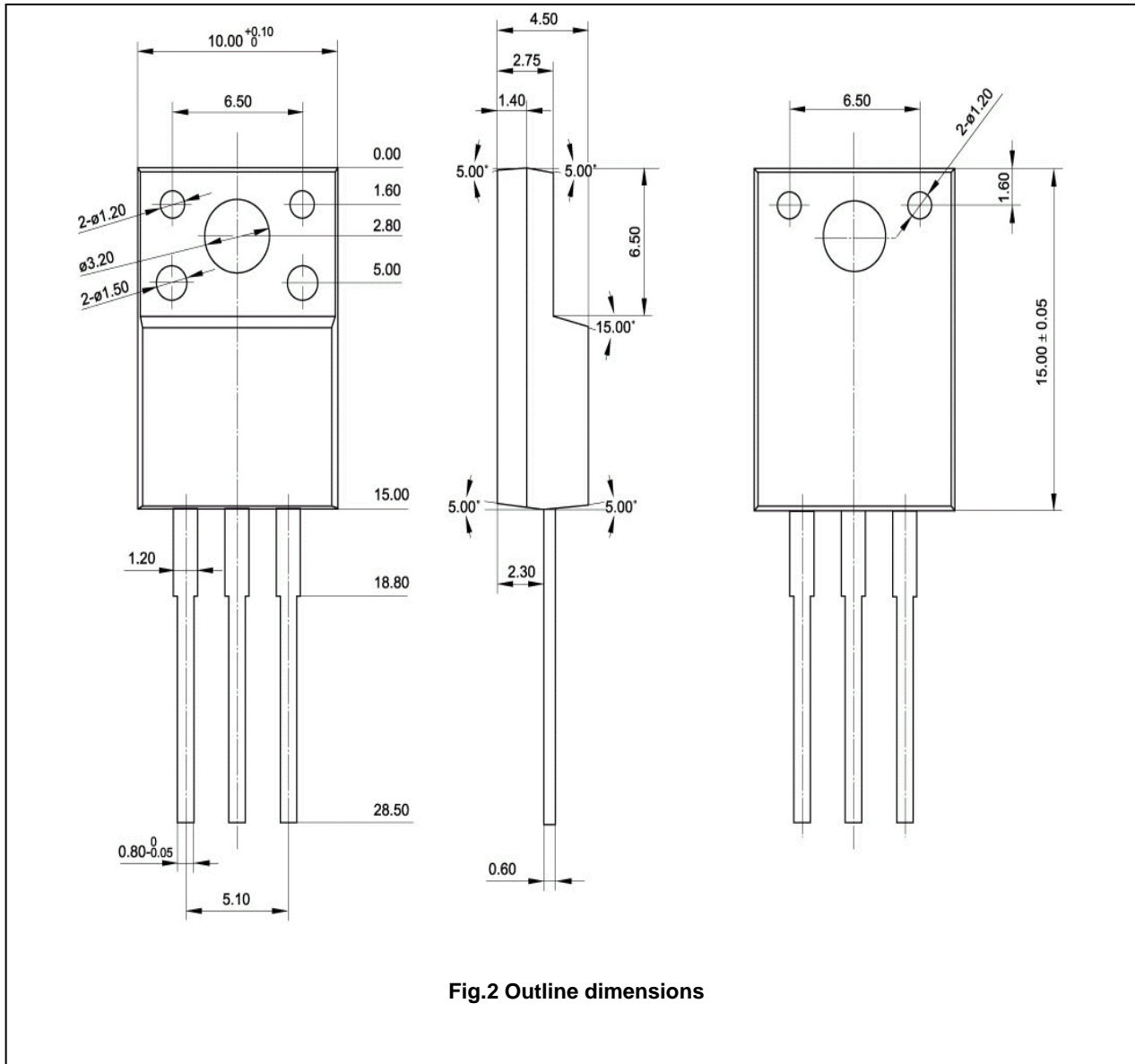


Fig.2 Outline dimensions