

Silicon NPN Power Transistors

2SC5895

DESCRIPTION

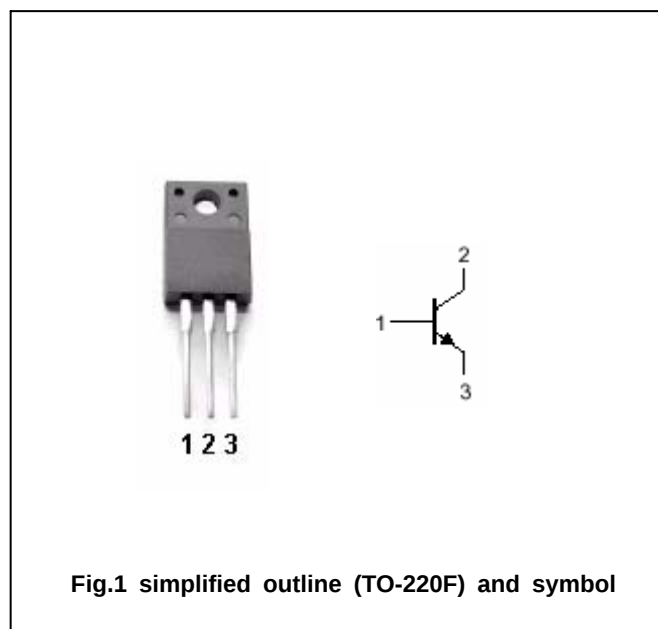
- With TO-220F package
- High speed switching
- Low collector saturation voltage

APPLICATIONS

- Power supply for audio and visual equipments such as TVs and VCRs
- Industrial equipments such as DC-DC converters

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	60	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		2	A
I_{CM}	Collector current-peak		4	A
P_C	Collector power dissipation	$T_a=25$	2	W
		$T_C=25$	15	
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 _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =0.25 A			0.5	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA; I _B =0	60			V
I _{CBO}	Collector cut-off current	V _{CB} =60V; I _E =0			100	μA
I _{CEO}	Collector cut-off current	V _{CE} =60V; I _B =0			100	μA
h _{FE-1}	DC current gain	I _C =0.2A ; V _{CE} =4V	60			
h _{FE-2}	DC current gain	I _C =1A ; V _{CE} =4V	80		250	
h _{FE-3}	DC current gain	I _C =2A ; V _{CE} =4V	30			
f _T	Transition frequency	I _C =0.1A ; V _{CB} =10V;f=10MHz		100		MHz

Switching times

t _{on}	Turn-on time	I _C =1A; I _{B1} =-I _{B2} =0.1A V _{CC} =50V		0.2		μs
t _{stg}	Storage time			0.7		μs
t _f	Fall time			0.15		μs

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PACKAGE OUTLINE

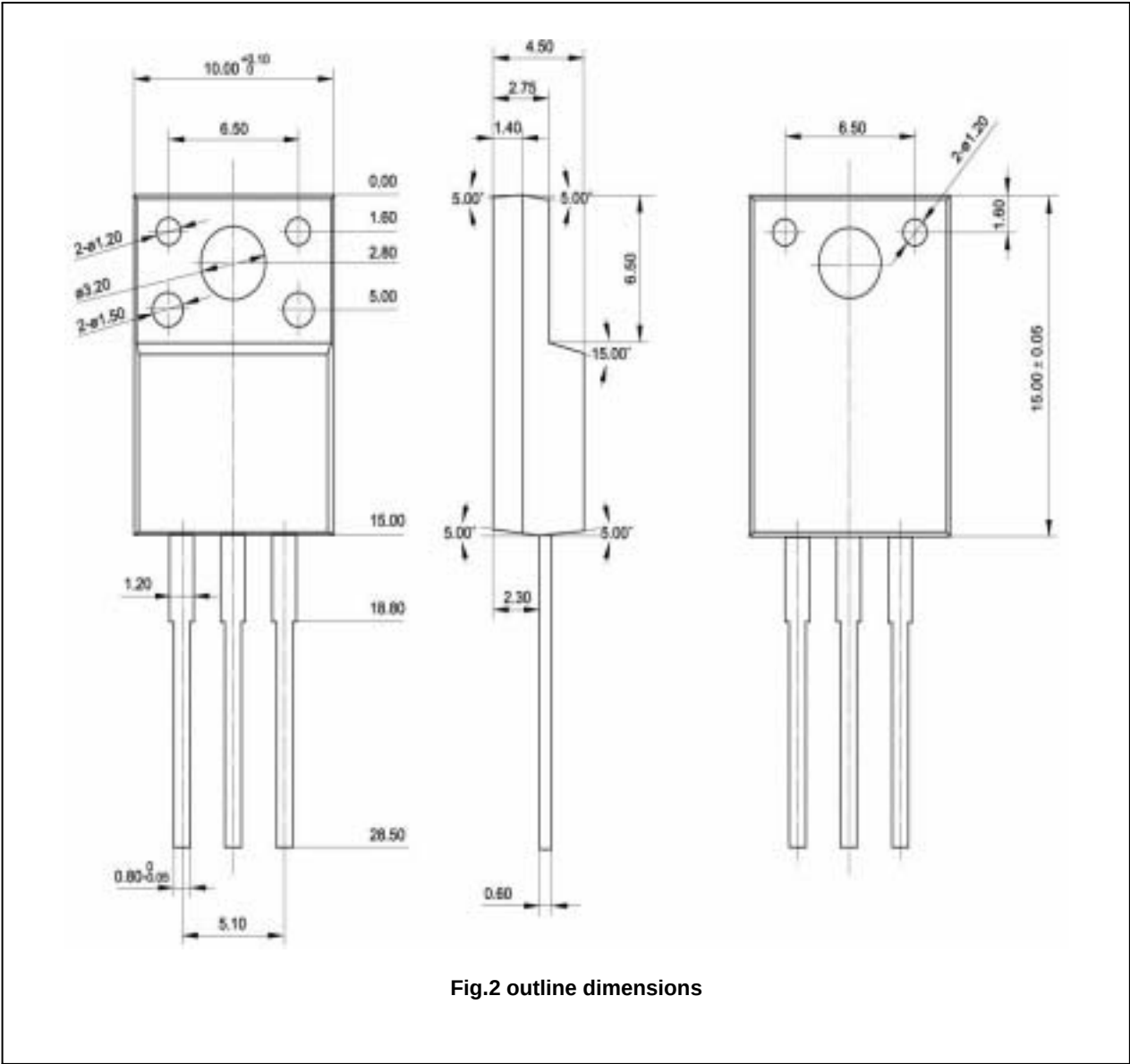


Fig.2 outline dimensions