

Silicon NPN Power Transistors

2SC3626

DESCRIPTION

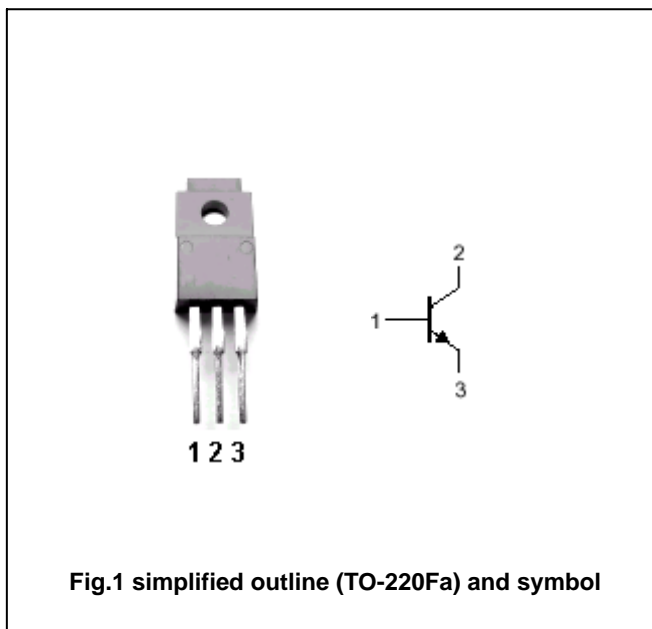
- With TO-220Fa package
- High collector breakdown voltage
- Excellent switching times

APPLICATIONS

- Switching regulator and high voltage switching applications
- High speed DC-DC converter 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	500	V
V _{CEO}	Collector-emitter voltage	Open base	400	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		8	A
I _{CM}	Collector current-peak		10	A
I _B	Base current		4	A
P _C	Collector power dissipation	T _a =25°C	2.0	W
		T _C =25°C	40	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

 $T_j=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10\text{mA}; I_B=0$	400			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1\text{mA}; I_E=0$	500			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4\text{A}; I_B=0.8\text{A}$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4\text{A}; I_B=0.8\text{A}$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=400\text{V}; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7\text{V}; I_C=0$			1	mA
h_{FE-1}	DC current gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	15			
h_{FE-2}	DC current gain	$I_C=4\text{A}; V_{CE}=5\text{V}$	10			

Switching times

t_r	Rise time	$V_{CC}\approx 200\text{V}, R_L=50\ \Omega$ $I_C=4\text{A}; I_{B1}=-I_{B2}=0.4\text{A}$			1.0	μs
t_s	Storage time				2.5	μs
t_f	Fall time				1.0	μs

PACKAGE OUTLINE

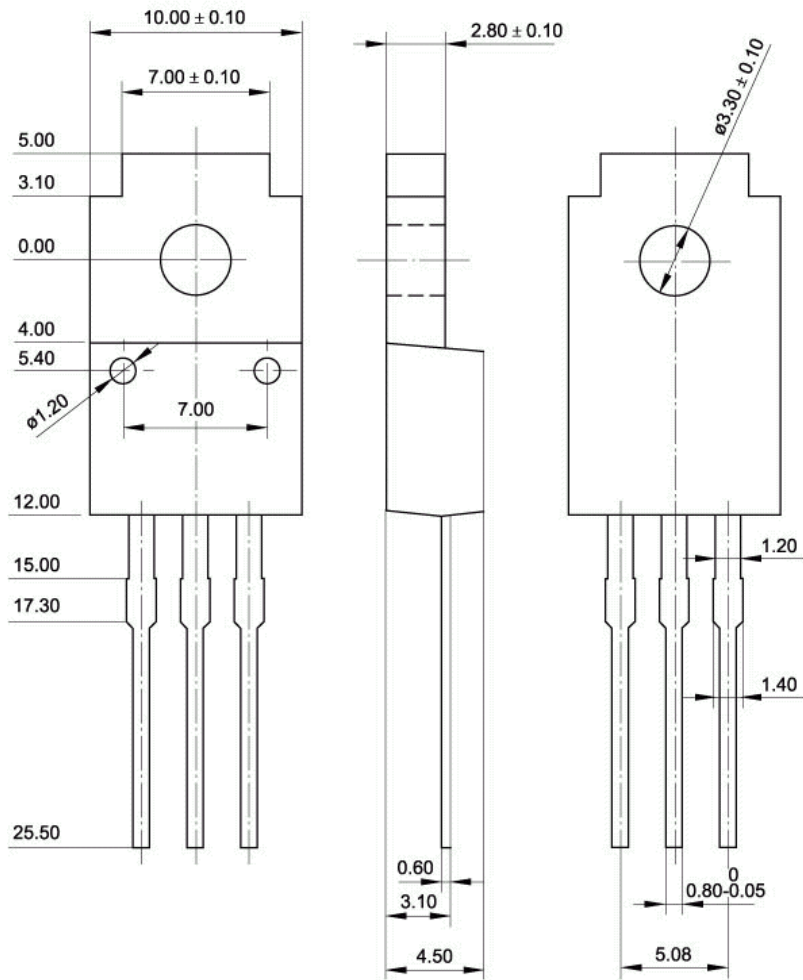


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)