

Silicon NPN Power Transistors

2SC3627

DESCRIPTION

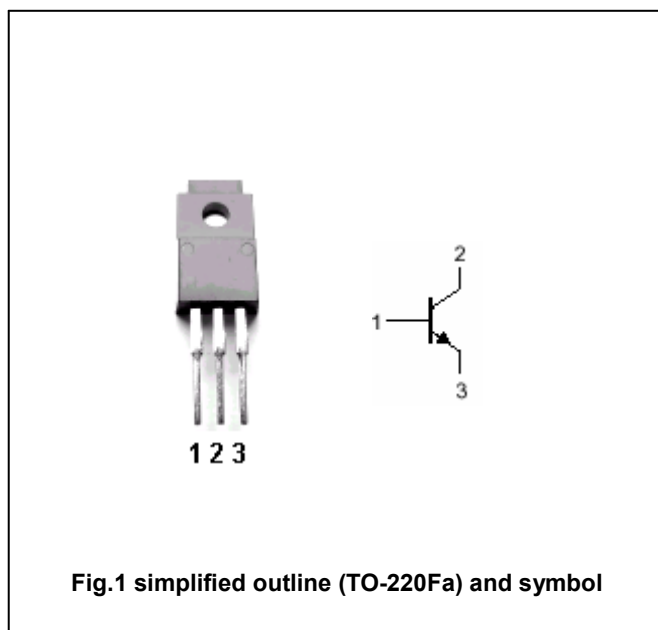
- With TO-220Fa package
- High collector breakdown voltage

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
I_B	Base current		2	A
P_C	Collector power dissipation	$T_a=25$	2.0	W
		$T_C=25$	30	
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	$I_C=10mA; I_B=0$	200			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA; I_E=0$	250			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A; I_B=0.5A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A; I_B=0.5A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=200V; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V; I_C=0$			1	mA
h_{FE-1}	DC current gain	$I_C=10mA; V_{CE}=5V$	15			
h_{FE-2}	DC current gain	$I_C=5A; V_{CE}=5V$	20		80	

Switching times

t_r	Rise time	$V_{CC} \approx 150V, R_L = 25\Omega$ $I_{B1} = -I_{B2} = 0.6A$			1.0	μs
t_s	Storage time				2.5	μs
t_f	Fall time				1.0	μs

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PACKAGE OUTLINE

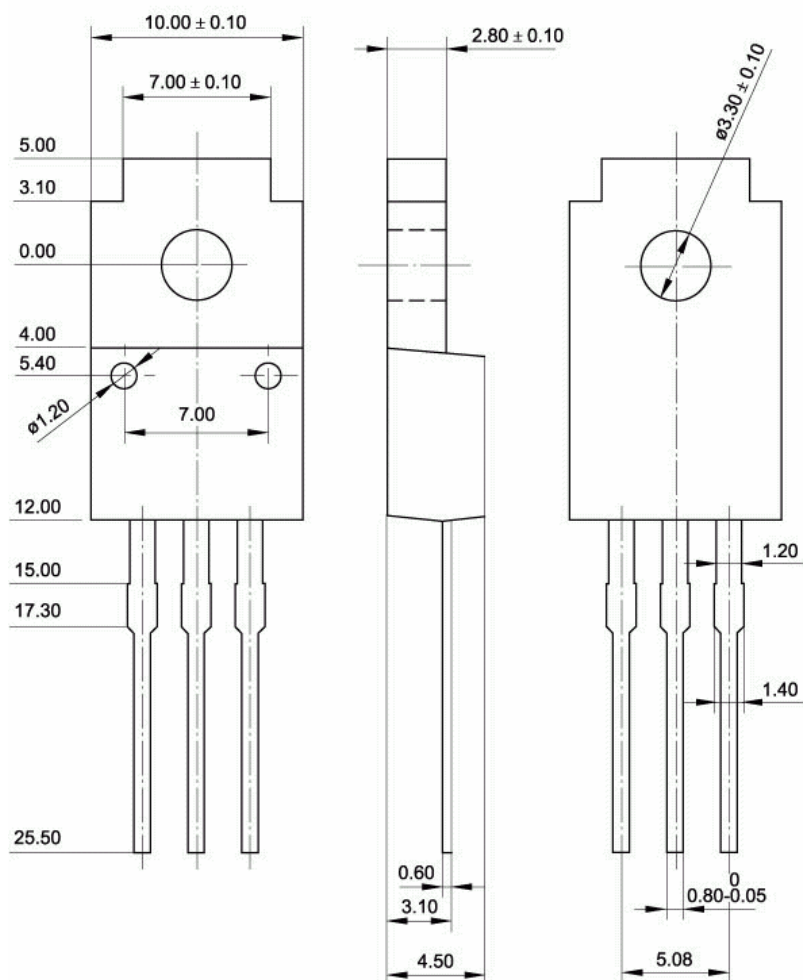


Fig.2 Outline dimensions (unindicated tolerance:±0.15 mm)