

Silicon NPN Power Transistors

2SD1680

DESCRIPTION

www.datasheet4u.com

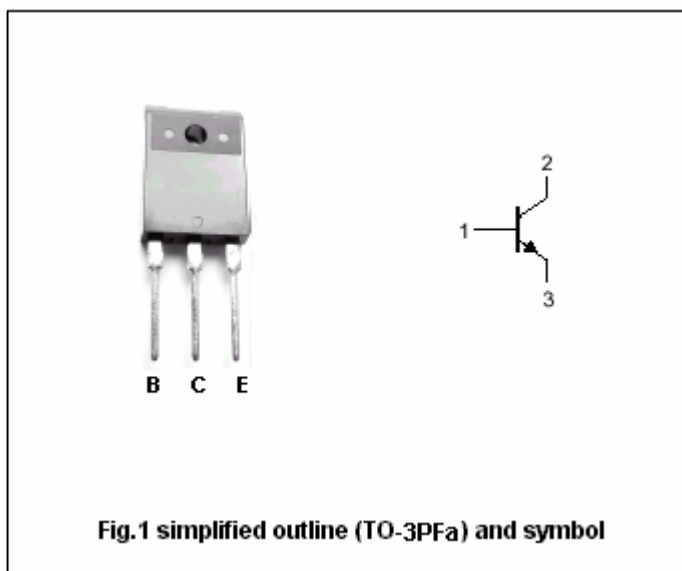
- With TO-3PFa package
- High speed switching
- High V_{CBO}
- Large collector power dissipation

APPLICATIONS

- For horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	330	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current (DC)		7	A
I_{CM}	Collector current (Pulse)		10	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$	3	W
		$T_C=25^\circ\text{C}$	70	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=30mA$; $I_B=0$	200			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA$; $I_E=0$	330			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A$; $I_B=0.5A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A$; $I_B=0.5A$			1.2	V
I_{CES}	Collector cut-off current	$V_{CE}=330V$; $V_{BE}=0$ $T_a=100^\circ C$			1 15	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V$; $I_C=0$			1	mA
h_{FE}	DC current gain	$I_C=5A$; $V_{CE}=4V$	15			
t_f	Fall time	$I_C=5A$ $I_{B1}=0.8A$, $V_{EB}=-5V$, $R_B=0.5\Omega$			0.75	μs

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PACKAGE OUTLINE

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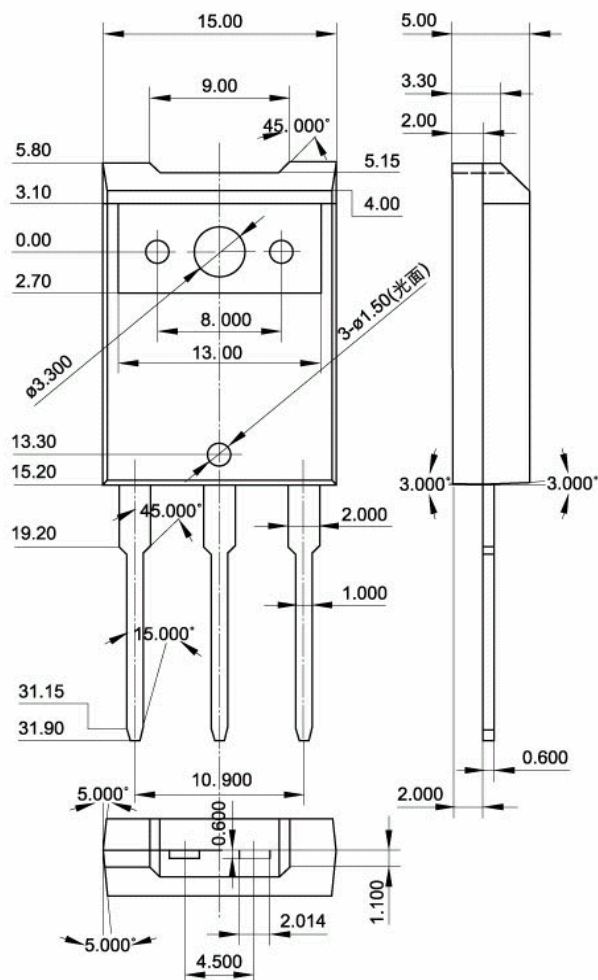


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)