

Silicon NPN Power Transistors

2SD2148

DESCRIPTION

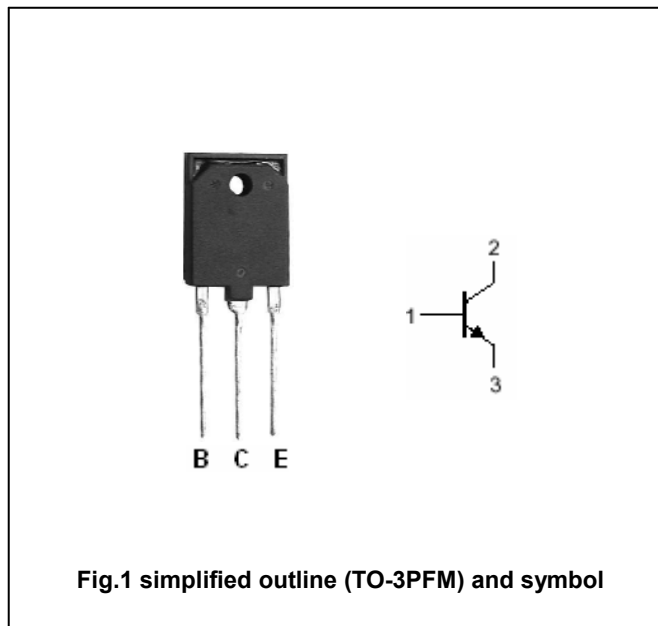
- With TO-3PFM package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- High speed switching power supply output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	700	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		8	A
I_{CM}	Collector current-peak		16	A
I_B	Base current		4	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	50	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=5mA$, $I_B=0$	700			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA$, $I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=7A$; $I_B=1.4A$			5.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=7A$; $I_B=1.4A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=800V$; $I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			10	μA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8			
h_{FE-2}	DC current gain	$I_C=7A$; $V_{CE}=5V$	4			

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PACKAGE OUTLINE

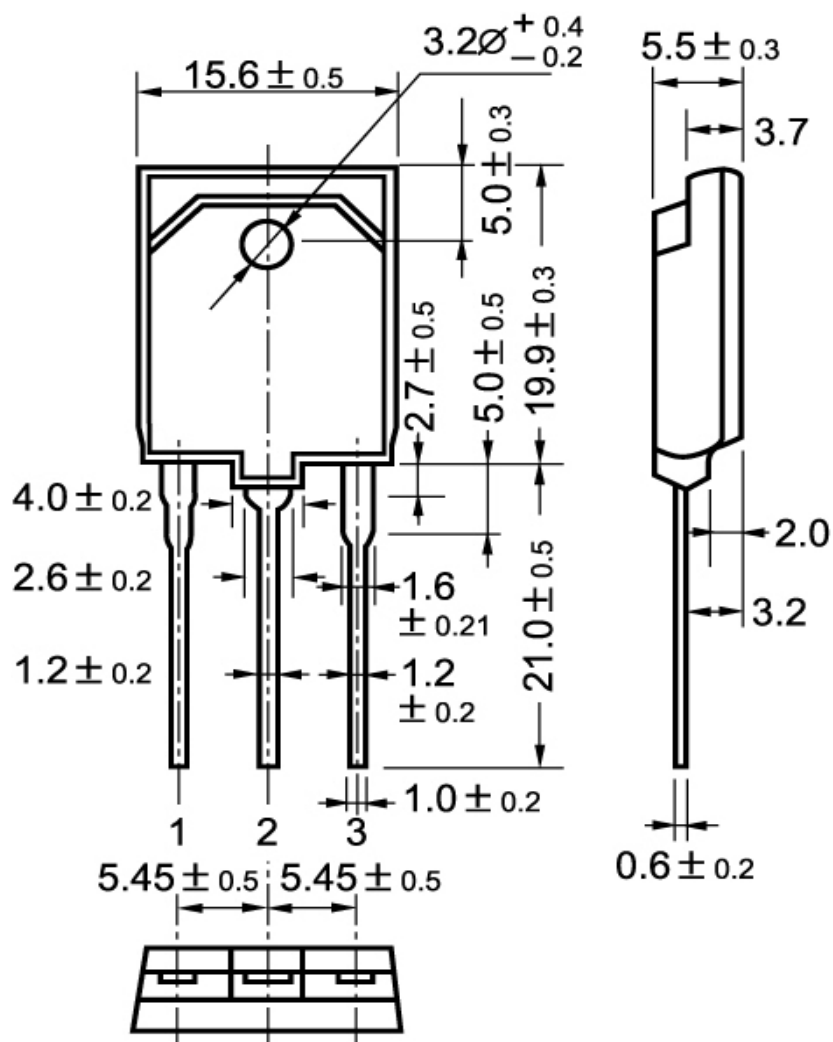


Fig.2 outline dimensions