

Silicon NPN Power Transistors

2SD1941

DESCRIPTION

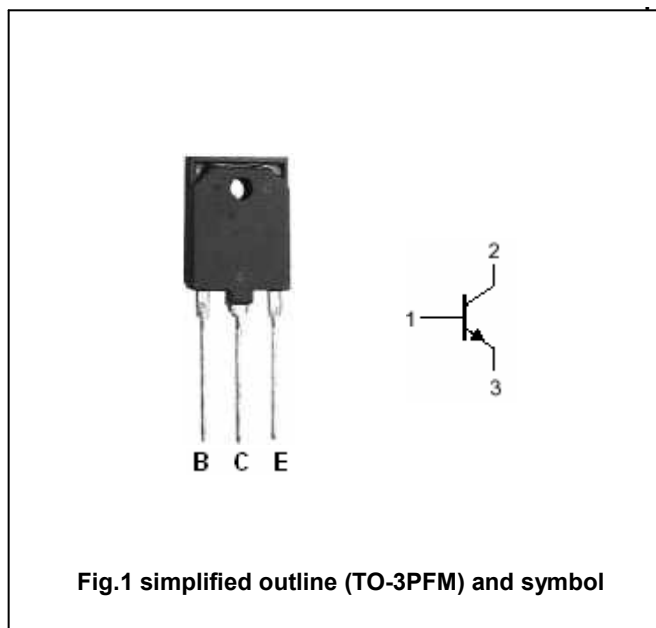
- With TO-3PFM package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Color TV horizontal output 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	1500	V
V_{CEO}	Collector-emitter voltage	Open base	600	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		6	A
I_B	Base current		3	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	50	W
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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1A$, $I_B=0$	600			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A$; $I_B=1A$		3.0	5.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A$; $I_B=1A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=800V$; $I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			1	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8		36	
h_{FE-2}	DC current gain	$I_C=5A$; $V_{CE}=5V$	5			

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PACKAGE OUTLINE

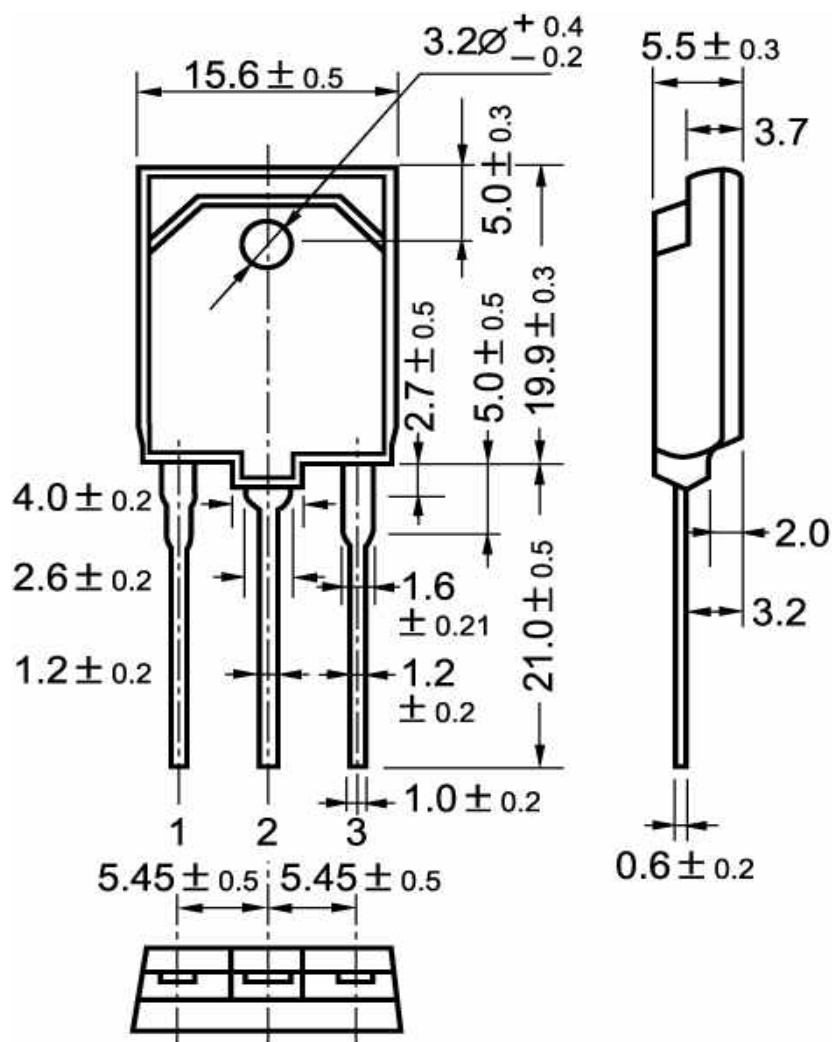


Fig.2 outline dimensions