

Silicon NPN Power Transistors

2SC643

DESCRIPTION

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

APPLICATIONS

- For color TV horizontal output applications

PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

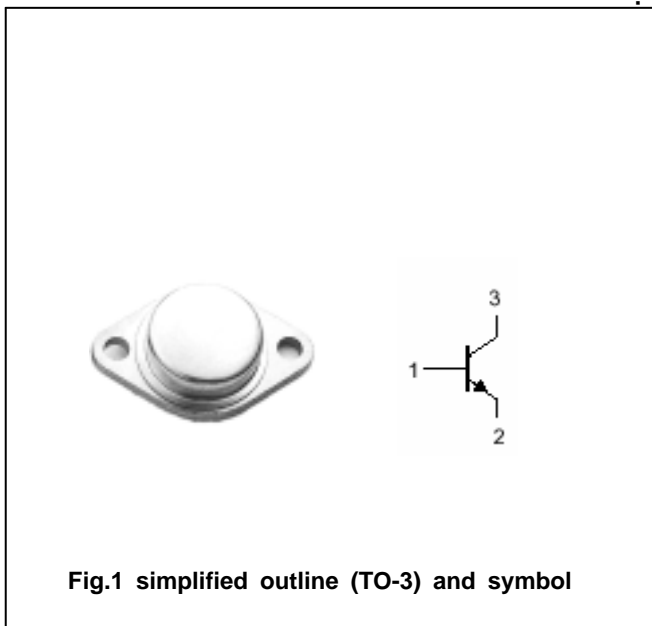


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta= )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	1100	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	600	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	5	V
I <sub>C</sub>	Collector current		2.5	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	50	W
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-55~150	

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## CHARACTERISTICS

 $T_j=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	$I_C=100mA; I_B=0$	600			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA; I_C=0$	5			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=2A; I_B=0.6A$			5.0	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=2A; I_B=0.6A$			1.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=500V; I_E=0$			10	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=5V; I_C=0$			100	$\mu A$
$h_{FE}$	DC current gain	$I_C=2A; V_{CE}=15V$	7			
$f_T$	Transition frequency	$I_C=0.1A; V_{CE}=10V$		2		MHz

PACKAGE OUTLINE

