

## Silicon NPN Power Transistors

2SC4595

## DESCRIPTION

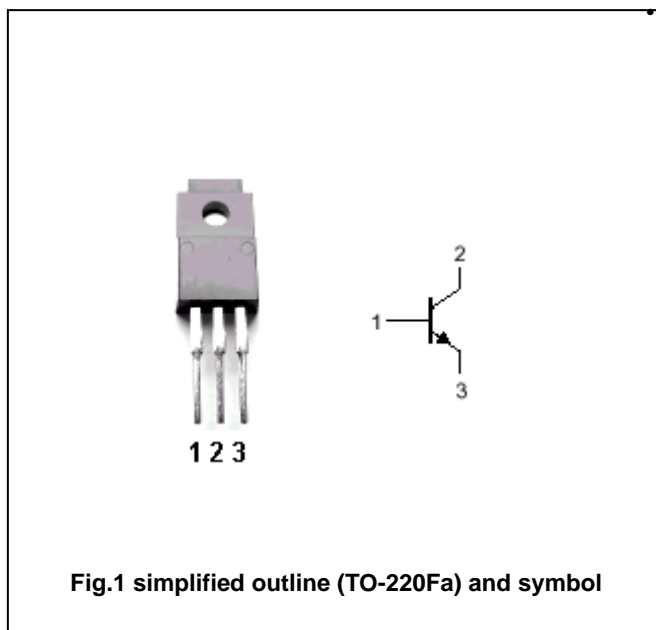
- With TO-220Fa package
- Low collector saturation voltage
- Wide area of safe operation

## APPLICATIONS

- For power switching applications

## PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



## Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	100	V
$V_{CEO}$	Collector-emitter voltage	Open base	60	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		12	A
$P_C$	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =0	60			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =50 μ A, I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A, I <sub>B</sub> =0.3A			0.3	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A, I <sub>B</sub> =0.3A			1.2	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =100V, I <sub>E</sub> =0			10	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			10	μ A
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =2A; V <sub>CE</sub> =2V	60		320	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =0.5A; V <sub>CE</sub> =10V		120		MHz

◆ h<sub>FE</sub> Classifications

D	E	F
60-120	100-200	160-320

