

## Silicon NPN Power Transistors

2SC5802

## DESCRIPTION

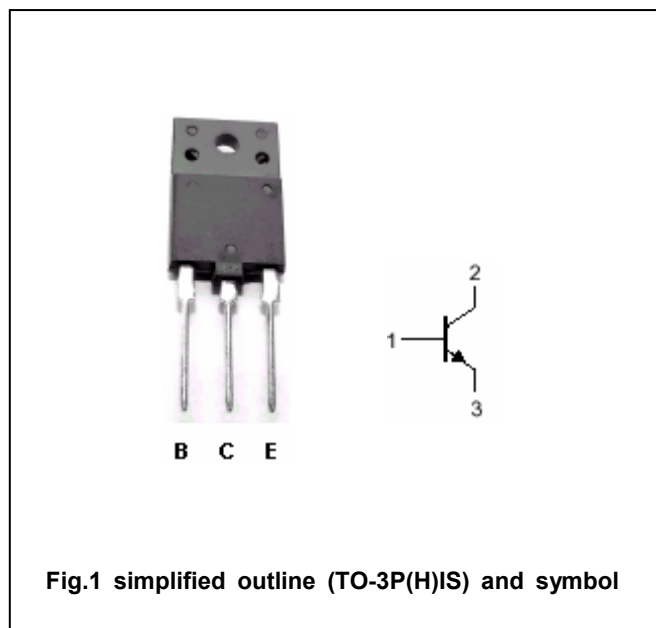
- With TO-3P(H)IS package
- High voltage;high speed
- Wide area of safe operation

## APPLICATIONS

- For high voltage color display horizontal deflection 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	800	V
$V_{EBO}$	Emitter-base voltage	Open collector	6	V
$I_C$	Collector current		10	A
$I_{CM}$	Collector current-Peak		30	A
$P_C$	Total power dissipation	$T_C=25^\circ\text{C}$	60	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℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =1.5A			3.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A; I <sub>B</sub> =1.5A			1.5	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =1400V; V <sub>BE</sub> =0			1.0	mA
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =800V; I <sub>E</sub> =0			10	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V; I <sub>C</sub> =0			1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	15		48	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =6A ; V <sub>CE</sub> =5V	7		10	
t <sub>f</sub>	Fall time	V <sub>CC</sub> =200V; I <sub>C</sub> =6A; I <sub>B1</sub> =1.2A I <sub>B2</sub> =-2.4A; R <sub>L</sub> =33.3Ω		0.1	0.3	μs

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## PACKAGE OUTLINE

