

## Silicon NPN Power Transistors

2SC2937

## DESCRIPTION

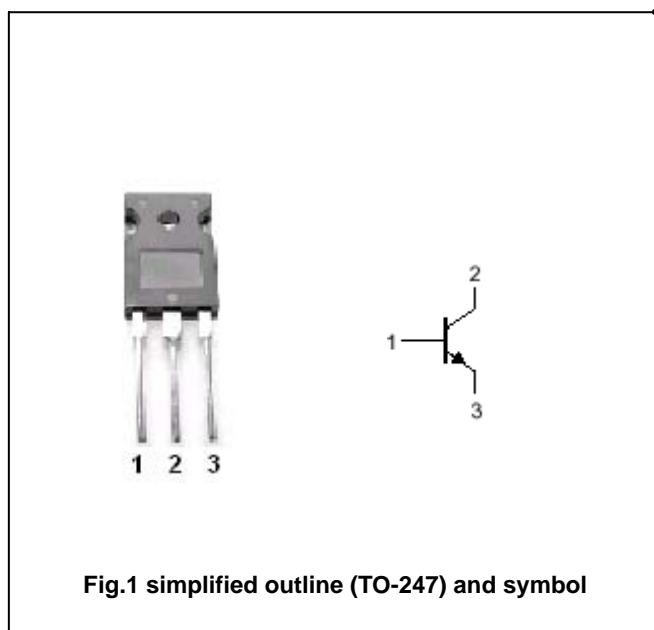
- With TO-247 package
- Switching power transistor
- High breakdown voltage

## APPLICATIONS

- For switching regulator applications

## PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

Absolute maximum ratings( $T_c=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	500	V
$V_{CEO}$	Collector-emitter voltage	Open base	400	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current (DC)		8	A
$I_{CM}$	Collector current-Peak		16	A
$P_D$	Total power dissipation	$T_c=25^\circ\text{C}$	80	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-55~150	$^\circ\text{C}$

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## CHARACTERISTICS

 $T_j=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.1\text{A}; I_B=0$	400			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=4\text{A}; I_B=0.8\text{A}$			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=4\text{A}; I_B=0.8\text{A}$			1.5	V
$I_{CBO}$	Collector cut-off current	At rated voltage			0.1	mA
$I_{CEO}$	Collector cut-off current					
$I_{EBO}$	Emitter cut-off current	At rated voltage			0.1	mA
$h_{FE-1}$	DC current gain	$I_C=4\text{A}; V_{CE}=2\text{V}$	10		50	
$h_{FE-2}$	DC current gain	$I_C=1\text{mA}; V_{CE}=2\text{V}$	5			
$f_T$	Transition frequency	$I_C=0.8\text{A}; V_{CE}=10\text{V}$		20		MHz

