

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC3577

DESCRIPTION

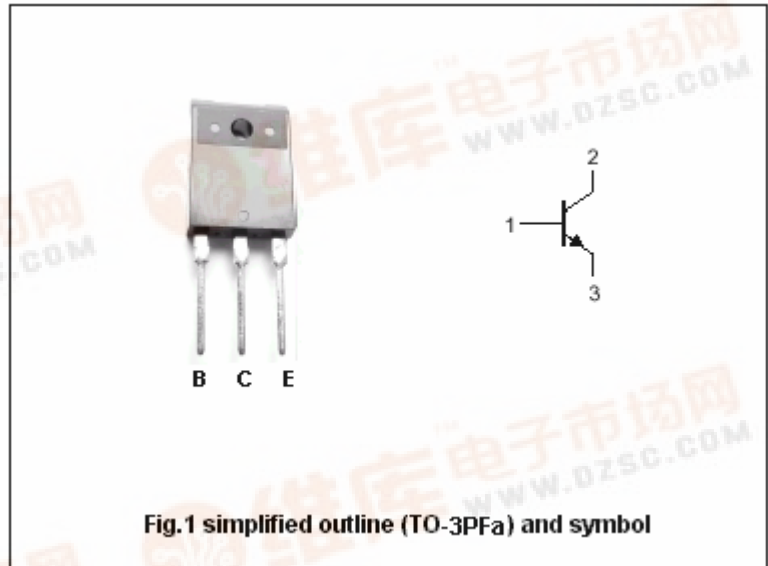
- With TO-3PFa package
- High breakdown voltage
- High speed

APPLICATIONS

- For high speed switching 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	850	V
V_{CEO}	Collector-emitter voltage	Open base	650	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		5	A
I_{CM}	Collector current-peak		10	A
I_B	Base current		3	A
P_C	Collector power dissipation	$T_C=25$	80	W
		$T_a=25$	3	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.5A; L=50mH$	650			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=3A; I_B=0.6A$			1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=3A; I_B=0.6A$			1.5	V
I_{CES}	Collector cut-off current	$V_{CB}=800V; V_{BE}=0$			50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V; I_C=0$			50	μA
h_{FE-1}	DC current gain	$I_C=10mA; V_{CE}=5V$	10			
h_{FE-2}	DC current gain	$I_C=3A; V_{CE}=5V$	6			
f_T	Transition frequency	$I_C=0.5A; V_{CE}=5V$		6		MHz

Switching times

t_{on}	Turn-on time	$I_C=3A; V_{CC}=250V$ $I_{B1}=0.6A; I_{B2}=-1.2A$			1.0	μs
t_{stg}	Storage time				2.5	μs
t_f	Fall time				0.5	μs

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PACKAGE OUTLINE

