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

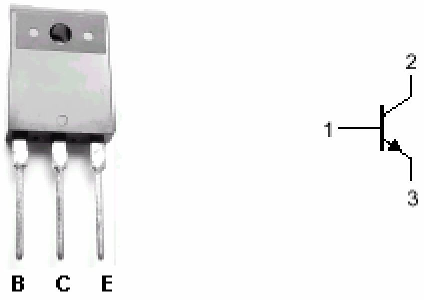

Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25□)

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	□

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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

PACKAGE OUTLINE

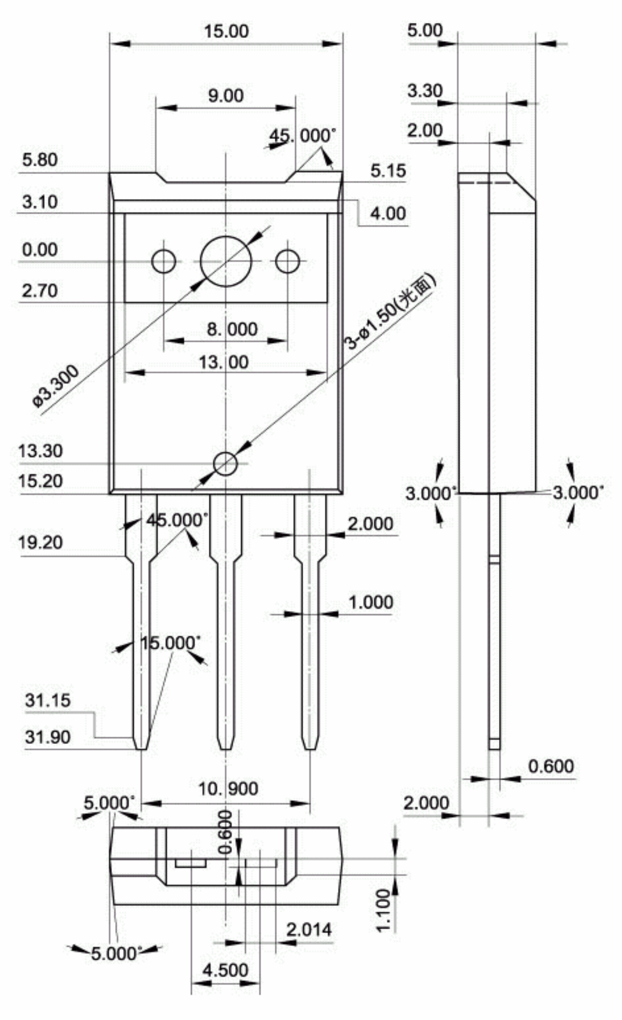

Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)