Silicon PNP Power Transistors 2SB1158

DESCRIPTION

- With TO-3PFa package
- Complement to type 2SD1713
- High f_T
- Wide area of safe operation

APPLICATIONS

- For high power amplifier applications

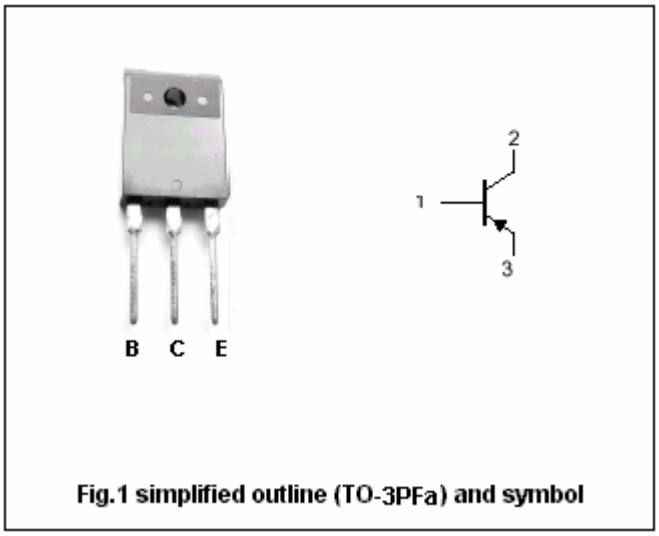

Fig.1 simplified outline (TO-3PFa) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector-emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-6	A
I_{CP}	Collector current-peak		-10	A
P_C	Collector power dissipation	T_C=25℃	70	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_{CEsat}	Collector-emitter saturation voltage	I_C=-4A ;I_B=-0.4A			-2.0	V
V_{BE}	Base-emitter on voltage	I_C=-4A ; V_{CE}=-5V			-1.8	V
I_{CBO}	Collector cut-off current	V_{CB}=-120V; I_E=0			-50	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-3V; I_C=0			-50	μA
h_{FE-1}	DC current gain	I_C=-20mA ; V_{CE}=-5V	20			
h_{FE-2}	DC current gain	I_C=-1A ; V_{CE}=-5V	60		200	
h_{FE-3}	DC current gain	I_C=-4A ; V_{CE}=-5V	20			
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=-10V;f=1MHz		180		pF
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-5V		20		MHz

◆ **h_{FE-2} classifications**

Q	S	P
60-120	80-160	100-200

PACKAGE OUTLINE

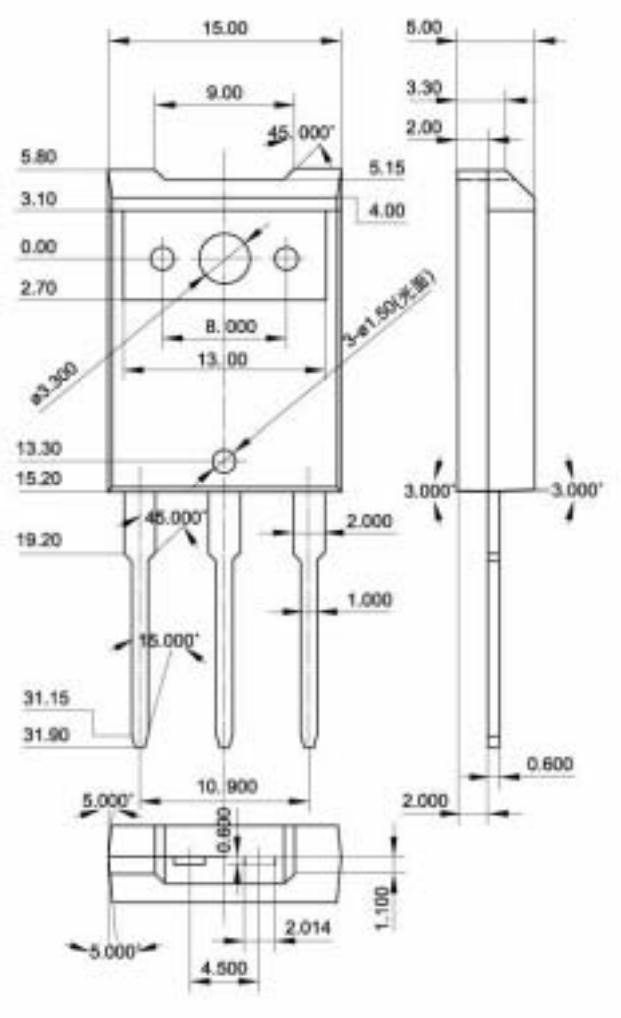

Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)