Silicon NPN Power Transistors 2SC3012

DESCRIPTION

- With TO-3PFa package
- Complement to type 2SA1232
- High transition frequency

APPLICATIONS

- Audio frequency power amplifier.

PINNING

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

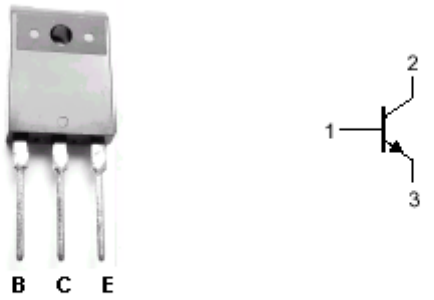

Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	130	V
V_{CEO}	Collector-emitter voltage	Open base	130	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
P_C	Collector power dissipation	T_C=25℃	100	W
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=5A; I_B=0.5A		0.6	1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=5A; I_B=0.5A		1.3	2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=130V; 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=2A ; V_{CE}=5V	60		320	
h_{FE-2}	DC current gain	I_C=5A ; V_{CE}=5V	40			
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz		150		pF
f_T	Transition frequency	I_C=1A ; V_{CE}=5V		60		MHz

◆ **h_{FE-1} Classifications**

R	Q	P
60-120	100-200	160-320

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PACKAGE OUTLINE

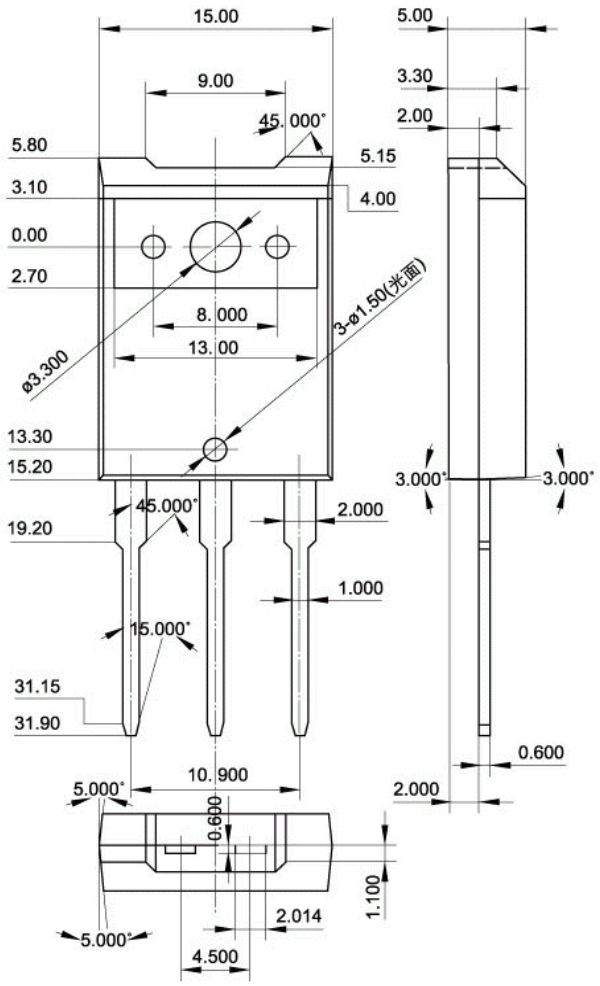

Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)