

Silicon NPN Power Transistors

2SD1110

DESCRIPTION

- With TO-3PFa package
- Complement to type 2SB849
- Wide area of safe operation

APPLICATIONS

- For use in low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

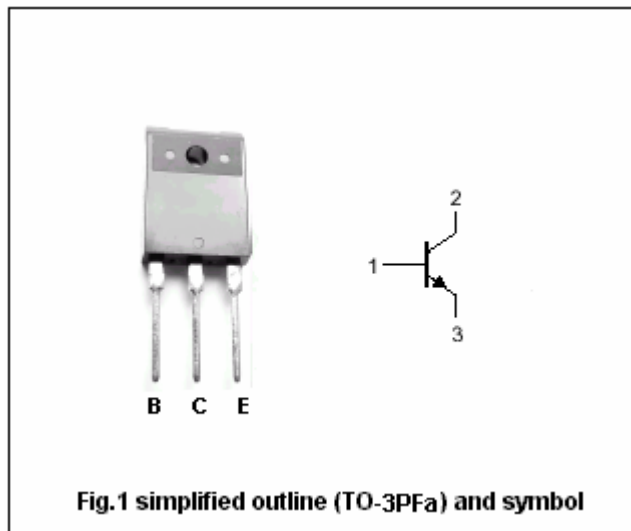


Fig.1 simplified outline (TO-3PFa) and symbol

ABSOLUTE MAXIMUM RATINGS (T_C=25°C)

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	7	V
I _C	Collector current		7	A
P _C	Collector power dissipation	T _C =25°C	80	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	120			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =5A ; I _B =0.5A			2.0	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =5A ; I _B =0.5A			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			50	μA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; 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	40		200	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V; f=1MHz		190		pF
f _T	Transition frequency	I _C =0.2A ; V _{CE} =5V		15		MHz

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PACKAGE OUTLINE



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