

Silicon NPN Power Transistors

2SC4278

DESCRIPTION

- With TO-247 package
- Complement to type 2SA1633
- High current and high power capability

APPLICATIONS

- For audio output applications

PINNING

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

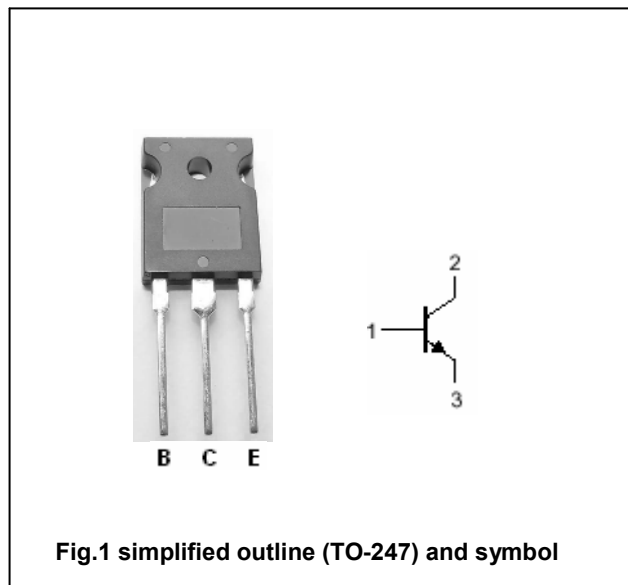


Fig.1 simplified outline (TO-247) and symbol

Absolute maximum ratings($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current (DC)		10	A
P_D	Total power dissipation	$T_c=25^\circ\text{C}$	100	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =25mA; I _B =0	150			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A ; I _B =0.5A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =0.5A			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =150V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	60		320	
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		20		MHz

◆ h_{FE} Classifications

D	E	F
60-120	100-200	160-320

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