

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

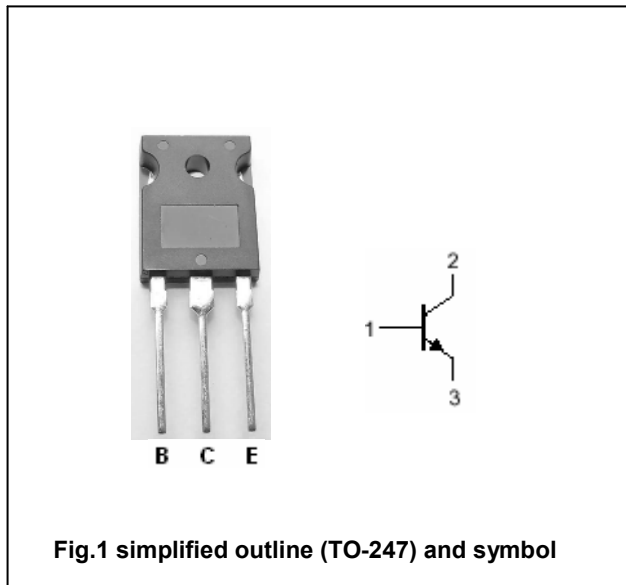


Fig.1 simplified outline (TO-247) and symbol

Absolute maximum ratings(Tc=25°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°C	100	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

 $T_j=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=25\text{mA}; I_B=0$	150			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5\text{A}; I_B=0.5\text{A}$			1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5\text{A}; I_B=0.5\text{A}$			2.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=150\text{V}; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=6\text{V}; I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	60		320	
f_T	Transition frequency	$I_C=1\text{A}; V_{CE}=10\text{V}$		20		MHz

◆ h_{FE} Classifications

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

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PACKAGE OUTLINE

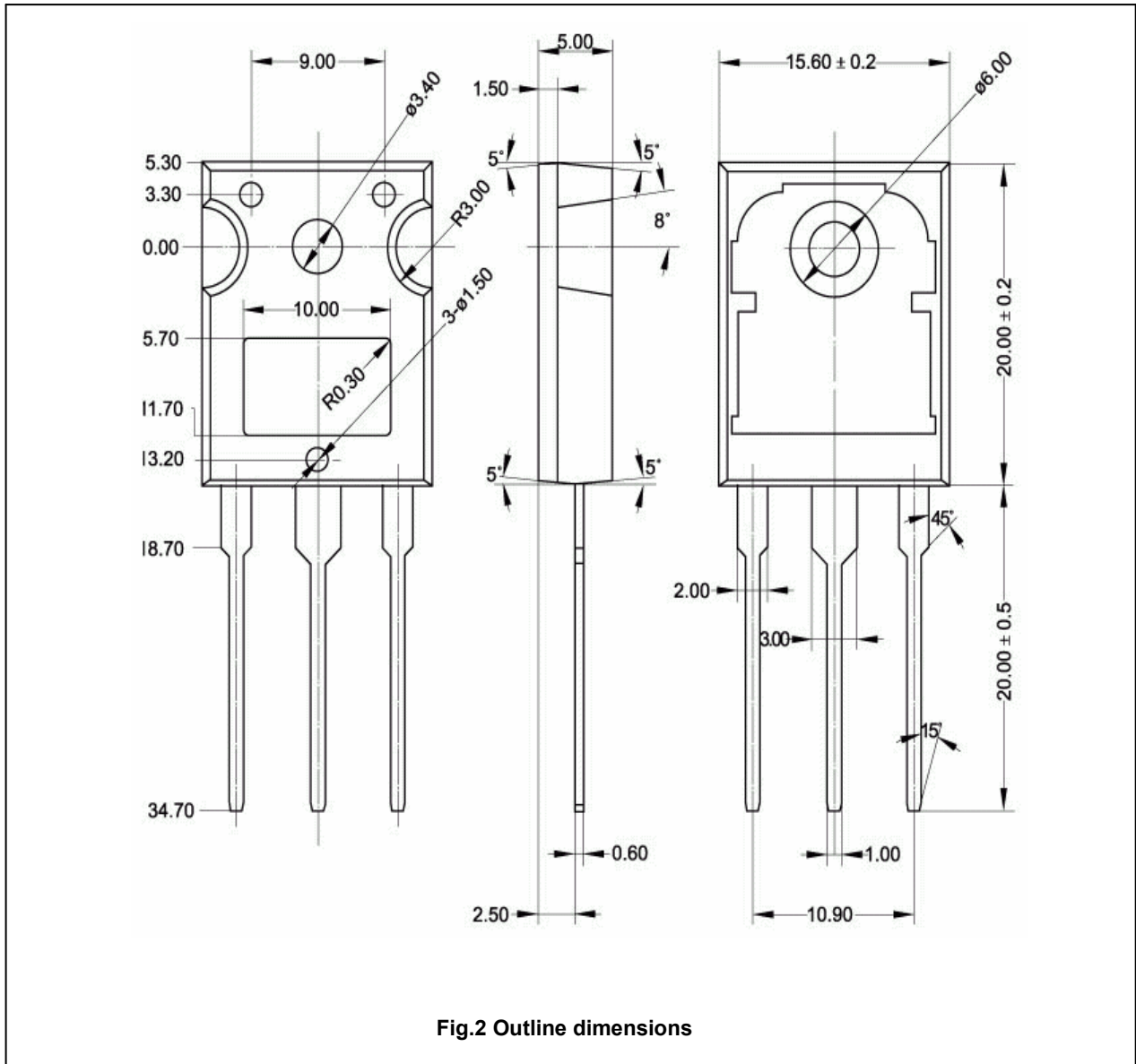


Fig.2 Outline dimensions