

Silicon NPN Power Transistors

2SD478

DESCRIPTION

- With TO-220C package
- Complement to type 2SB568

APPLICATIONS

- Low frequency high voltage power amplifier TV vertical deflection output

PINNING

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

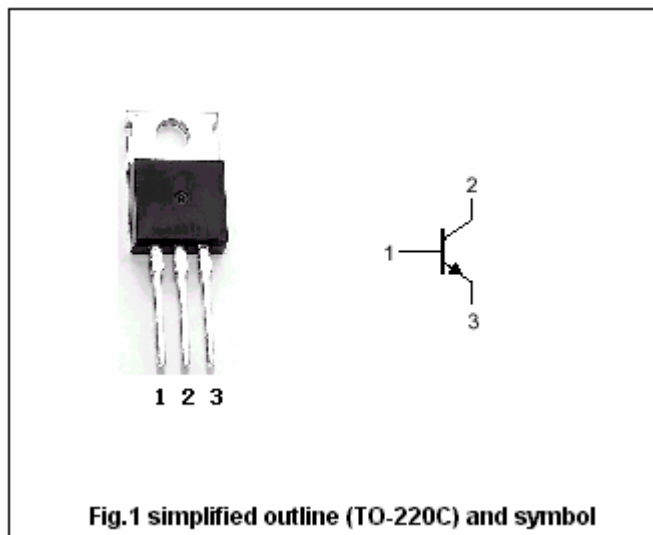


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	200	V
V _{CEO}	Collector-emitter voltage	Open base	150	V
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current		2	A
I _{CM}	Collector current-peak		5	A
P _C	Collector power dissipation	T _a =25°C	1.8	W
		T _C =25°C	30	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-45~150	°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 =50mA; R _{BE} =∞	150			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =5mA; I _C =0	6			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =0.5 A; I _B =50m A			3.0	V
V _{BE}	Base-emitter voltage	I _C =50mA ; V _{CE} =4V			1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			1.0	μA
I _{EBO}	Emitter cut-off current	V _{EB} =4V; I _C =0			1.0	μA
h _{FE-1}	DC current gain	I _C =50mA ; V _{CE} =4V	60		320	
h _{FE-2}	DC current gain	I _C =0.5A ; V _{CE} =10V	60			

◆ h_{FE-1} classifications

B	C	D
60-120	100-200	160-320

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PACKAGE OUTLINE

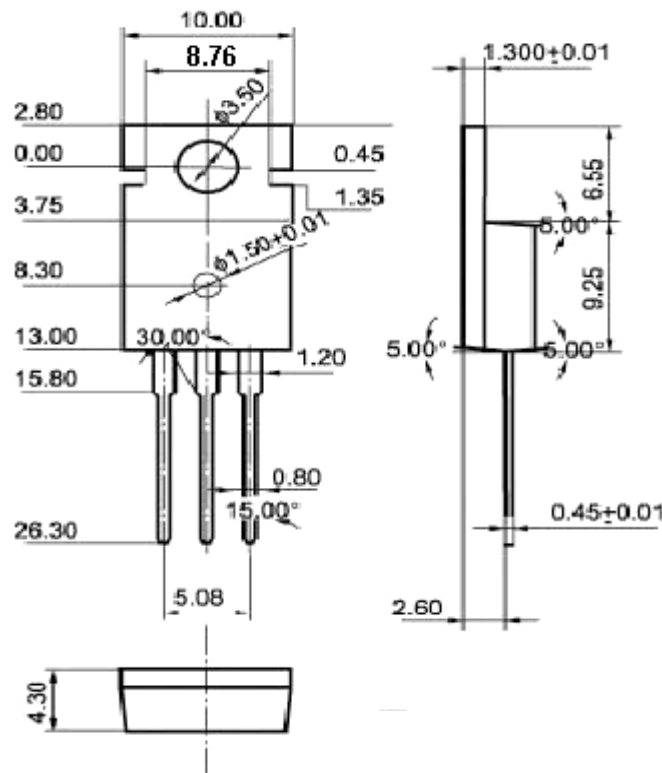


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)