

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SD1136

DESCRIPTION

- With TO-220C package
- High collector-base breakdown voltage
: $V_{CBO}=200V(\text{min})$

APPLICATIONS

- For power switching and TV vertical deflection output applications

PINNING

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

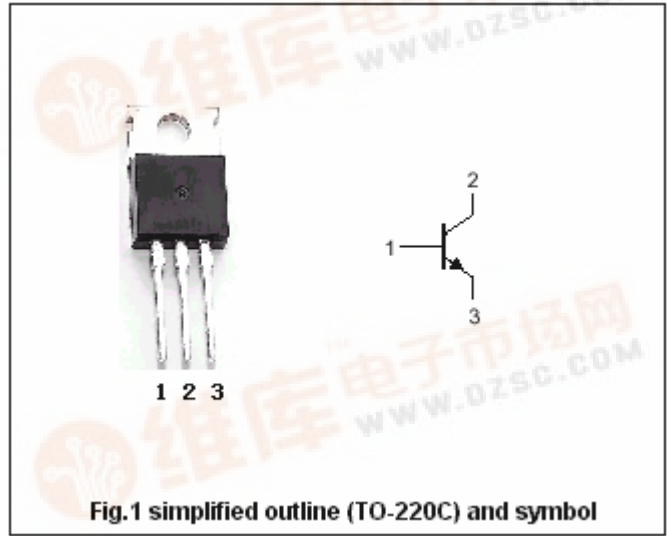


Fig.1 simplified outline (TO-220C) and symbol

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	80	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		4	A
I_{CM}	Collector current-Peak		5	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$	1.8	W
		$T_C=25^\circ\text{C}$	30	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-45~150	$^\circ\text{C}$

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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; I _B =0	80			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =4 A; I _B =0.4 A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =4 A; I _B =0.4 A			1.5	V
I _{CEO}	Collector cut-off current	V _{CE} =200V; I _B =0			50	μA
I _{EBO}	Collector cut-off current	V _{EB} =5V; I _C =0			50	μA
h _{FE}	DC current gain	I _C =4A ; V _{CE} =5V	20			

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PACKAGE OUTLINE

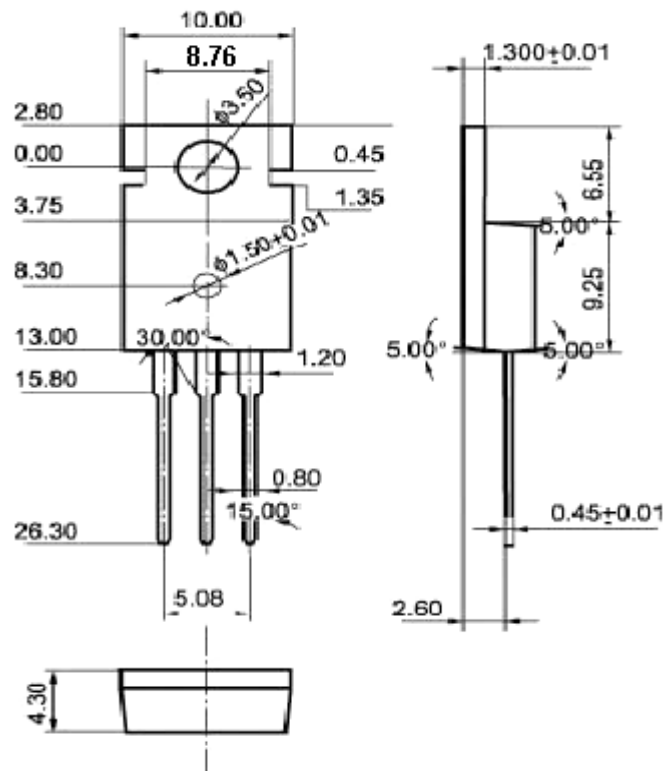


Fig.2 Outline dimensions (unindicated tolerance: ± 0.10 mm)