

Silicon NPN Power Transistors

2SD386 2SD386A

DESCRIPTION

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

APPLICATIONS

- For TV vertical deflection output applications

PINNING

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

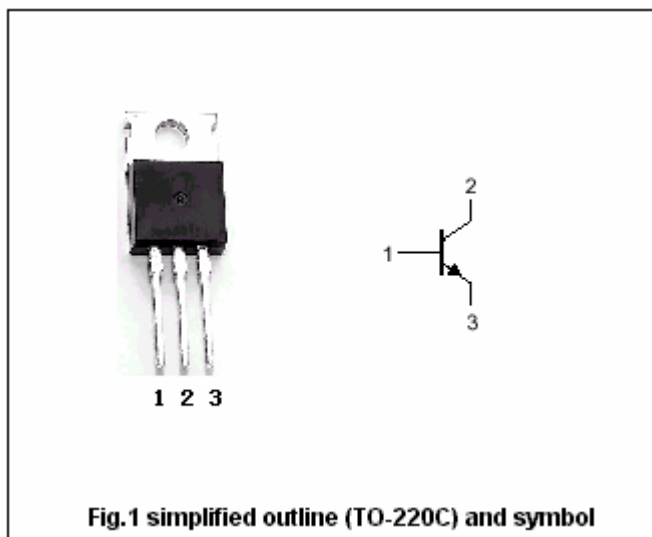


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings($T_a=25^\circ$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	200	V
V_{CEO}	Collector-emitter voltage	2SD386	120	V
		2SD386A	150	
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current	2SD386	3	A
		2SD386A	2	
I_{CM}	Collector current-Peak		10	A
P_C	Collector dissipation	$T_C=25^\circ$	25	W
		$T_a=25^\circ$	1.75	
T_j	Junction temperature		150	$^\circ$
T_{stg}	Storage temperature		-40~150	$^\circ$

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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	2SD386	I _C =25mA; I _B =0	120			V
		2SD386A		150			
V _{CEsat}	Collector-emitter saturation voltage	2SD386	I _C =1A; I _B =0.1A			1.0	V
		2SD386A				1.5	
V _{BEsat}	Base-emitter saturation voltage		I _C =1A; I _B =0.1A			1.8	V
I _{CBO}	Collector cut-off current		V _{CB} =180V; I _E =0			1.0	mA
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			5.0	mA
h _{FE}	DC current gain		I _C =0.5A; V _{CE} =2V	40		320	
f _T	Transition frequency		I _C =0.5A; V _{CE} =5V		8		MHz

◆ h_{FE} Classifications

C	D	E	F
40-80	60-120	100-200	160-320

