

Silicon NPN Power Transistors

2SD386 2SD386A

DESCRIPTION

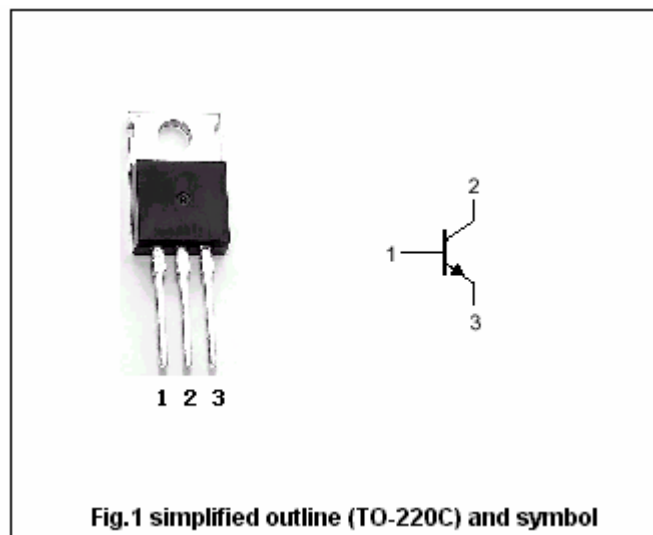
- With TO-220C package
- High voltage : $V_{CBO}=200V(\text{min})$

APPLICATIONS

- For TV vertical deflection output applications

PINNING

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

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

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage		Open emitter	200	V
V_{CEO}	Collector-emitter voltage	2SD386	Open base	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		$T_C=25^\circ\text{C}$	25	W
			$T_a=25^\circ\text{C}$	1.75	
T_j	Junction temperature			150	$^\circ\text{C}$
T_{stg}	Storage temperature			-40~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=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

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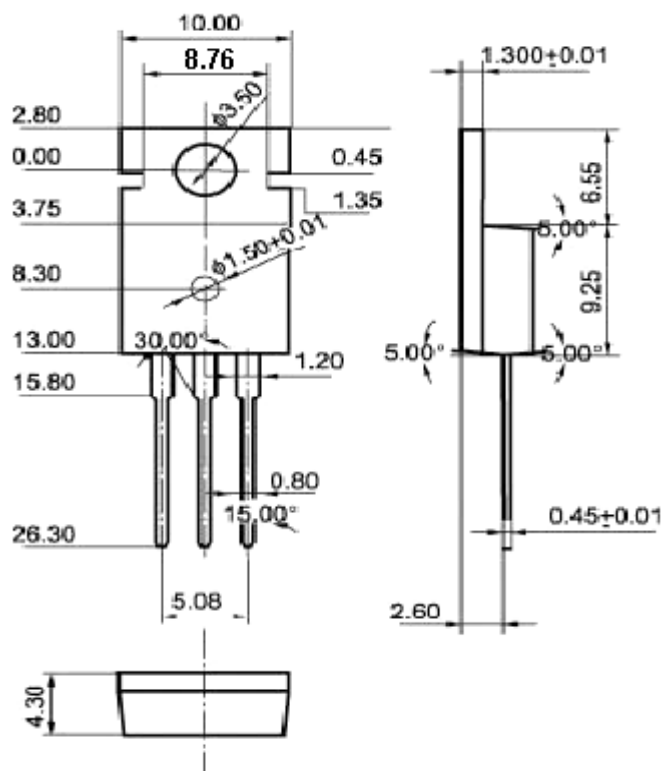


Fig.2 Outline dimensions (unindicated tolerance:±0.10mm)