

Silicon Power Transistors

2N6533

DESCRIPTION

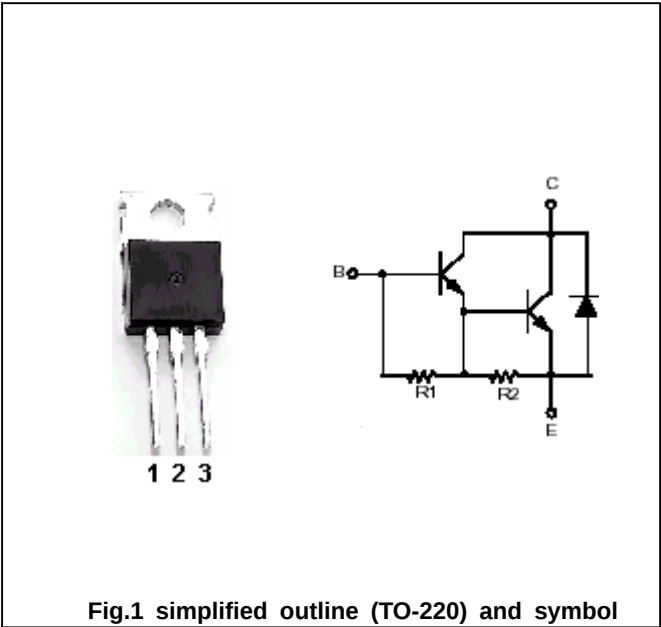
- DARLINGTON
- With TO-220 package

APPLICATIONS

- Power switching
- Hammer drivers
- Series and shunt regulators
- Audio amplifiers

PINNING

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



Absolute maximum ratings(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	120	V
V _{CEO}	Collector-emitter voltage	Open base	120	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		8	A
I _{CM}	Collector current-Peak		15	A
I _B	Base current		0.25	A
P _T	Total power dissipation	T _C =25	65	W
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{θJC}	Thermal resistance junction to case	1.92	/W

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CHARACTERISTICS

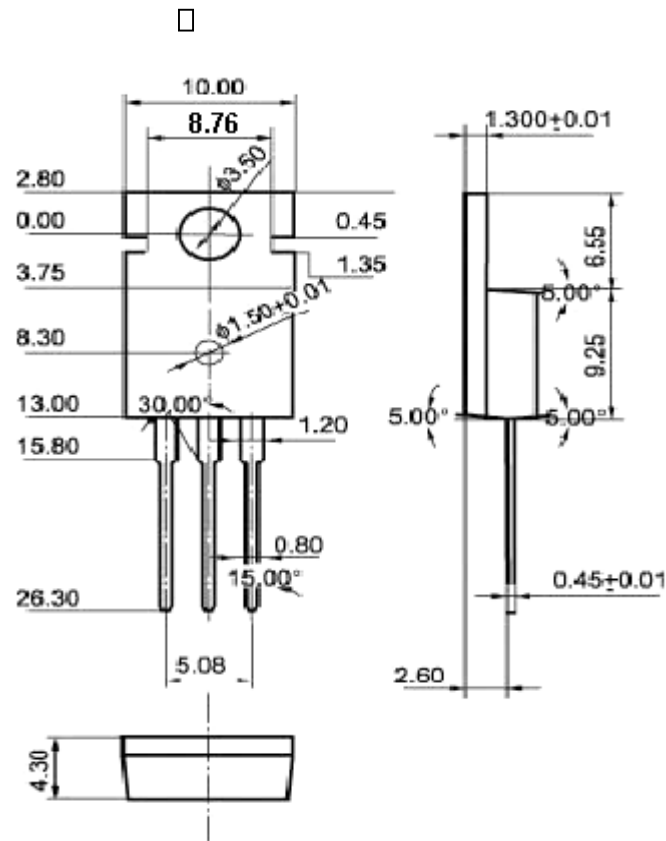
T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; I _B =0	120			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =3A I _B =6mA			2.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =8A I _B =0.08A			3.0	V
V _{BE-1}	Base -emitter on voltage	I _C =3A ; V _{CE} =3V			2.8	V
V _{BE-2}	Base -emitter on voltage	I _C =8A ; V _{CE} =3V			4.5	V
I _{CBO}	Collector cut-off current	V _{CB} =120V I _E =0			0.5	mA
I _{CEO}	Collector cut-off current	V _{CE} =120V I _B =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			5.0	mA
h _{FE-1}	DC current gain	I _C =3A ; V _{CE} =3V	1000		10000	
h _{FE-2}	DC current gain	I _C =8A ; V _{CE} =3V	100		5000	
V _F	Diode forward voltage	I _F =5A			4.0	V

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PACKAGE OUTLINE

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