

Silicon NPN Power Transistors

2N6576 2N6577 2N6578

DESCRIPTION

- With TO-3 package
- DARLINGTON
- High DC current gain

APPLICATIONS

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

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

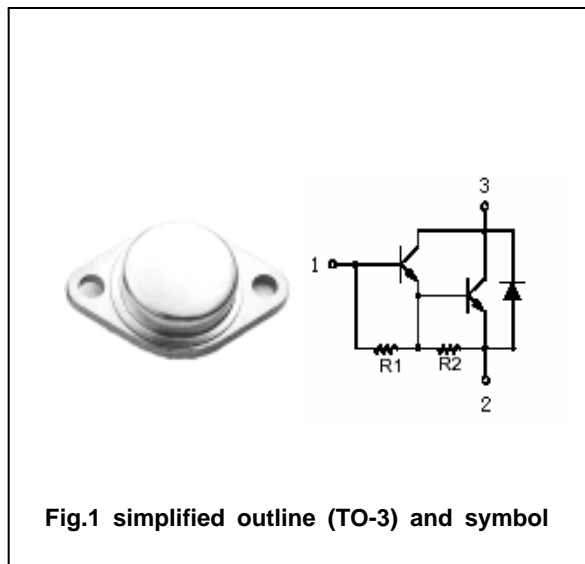


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6576	60	V
		2N6577	90	
		2N6578	120	
V _{CEO}	Collector-emitter voltage	2N6576	60	V
		2N6577	90	
		2N6578	120	
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		15	A
I _{CM}	Collector current-peak		30	A
I _B	Base current		0.25	A
P _D	Total Power Dissipation	T _C =25	120	W
T _j	Junction temperature		200	
T _{stg}	Storage temperature		-65~200	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	2N6576	I _C =0.2A ; I _B =0			V
		2N6577				
		2N6578				
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =10A; I _B =100mA			2.8	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =15A ; I _B =150mA			4.0	V
V _{BE sat-1}	Base-emitter saturation voltage	I _C =10A; I _B =100mA			3.5	V
V _{BE sat-2}	Base-emitter saturation voltage	I _C =15A ; I _B =150mA			4.5	V
I _{CEO}	Collector cut-off current	2N6576			1.0	mA
		2N6577				
		2N6578				
I _{CBO}	Collector cut-off current	2N6576			0.5	mA
		2N6577				
		2N6578				
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			7.5	mA
h _{FE-1}	DC current gain	I _C =0.4A ; V _{CE} =3V	200			
h _{FE-2}	DC current gain	I _C =4A ; V _{CE} =3V	2000		20000	
h _{FE-3}	DC current gain	I _C =10A ; V _{CE} =3V	500		5000	
h _{FE-4}	DC current gain	I _C =15A ; V _{CE} =4V	100			
V _F	Diode forward voltage	I _F =15A			4.5	A

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.46	/W

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PACKAGE OUTLINE

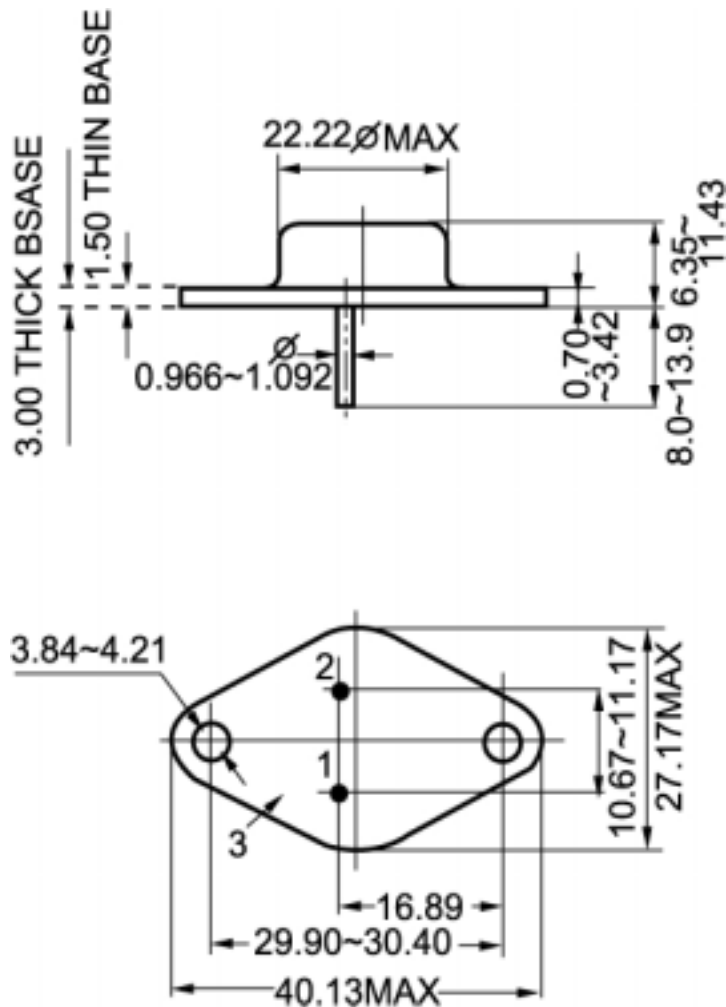


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)