

Silicon NPN Power Transistors

2N6253

DESCRIPTION

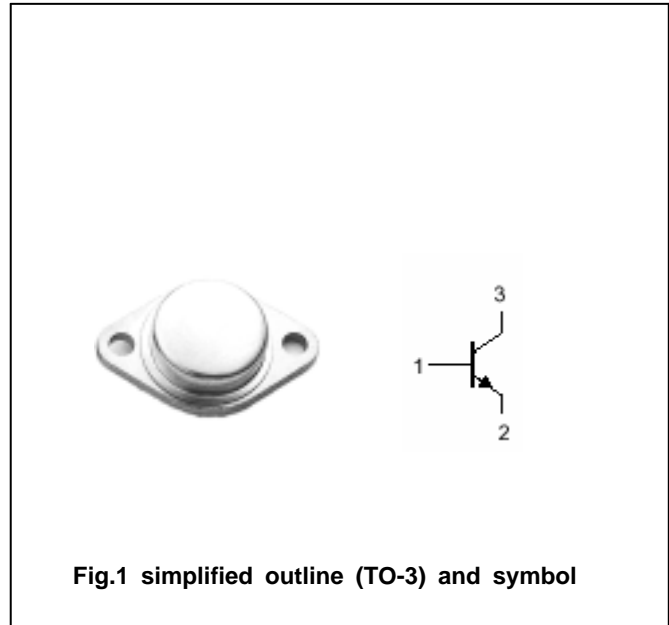
- With TO-3 package
- Low collector saturation voltage
- Wide safe operating area
- High dissipation capability

APPLICATIONS

- Series and shunt regulators
- High fidelity amplifiers
- Power switching circuits

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	55	V
V_{CEO}	Collector-emitter voltage	Open base	45	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		15	A
I_B	Base current		7	A
P_D	Total Power Dissipation	$T_C=25$	115	W
T_j	Junction temperature		200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.5	/W

Silicon NPN Power Transistors

2N6253

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; I _B =0	45			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.3A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =15A ; I _B =5A			4.0	V
V _{BE}	Base-emitter on voltage	I _C =3A ; V _{CE} =4V			1.7	V
I _{CEO}	Collector cut-off current	V _{CE} =25V ; I _B =0			1.5	mA
I _{CEX}	Collector cut-off current	V _{CE} =55V ; V _{BE} =-1.5V V _{CE} =50V ; V _{BE} =-1.5V T _C =150			2.0 10.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			10	mA
h _{FE-1}	DC current gain	I _C =3A ; V _{CE} =4V	20		70	
h _{FE-2}	DC current gain	I _C =15A ; V _{CE} =4V	3			

Silicon NPN Power Transistors

2N6253

PACKAGE OUTLINE

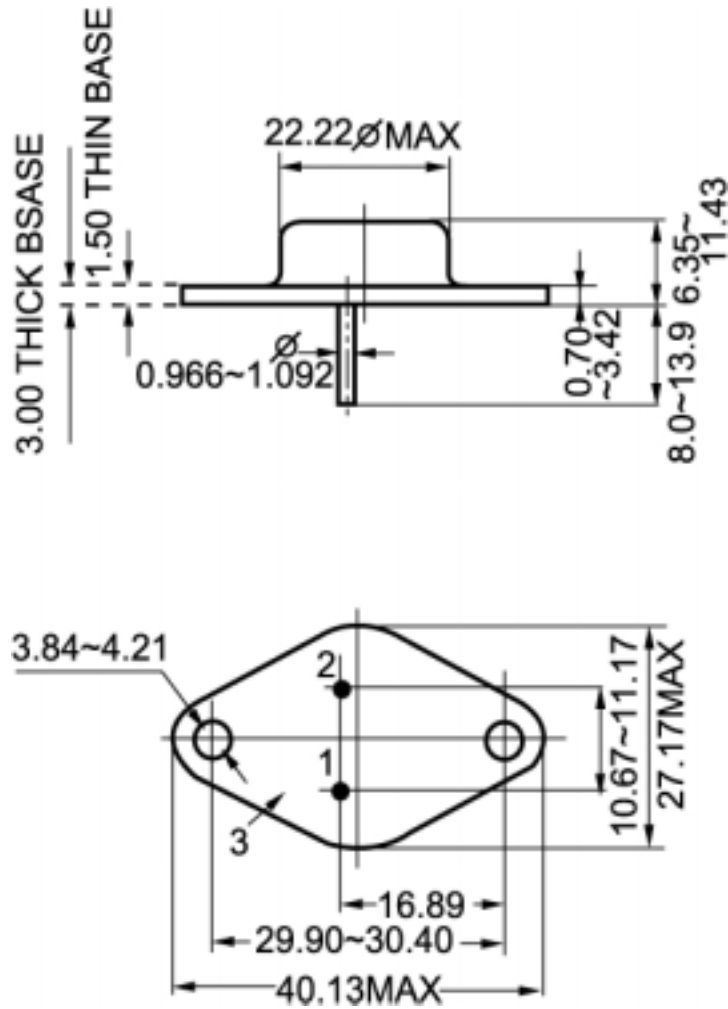


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)