

Silicon NPN Power Transistors

2SD555

DESCRIPTION

- With TO-3 package
- High power dissipation
- Complement to type 2SB600

APPLICATIONS

- For high speed ,high current ,high power applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

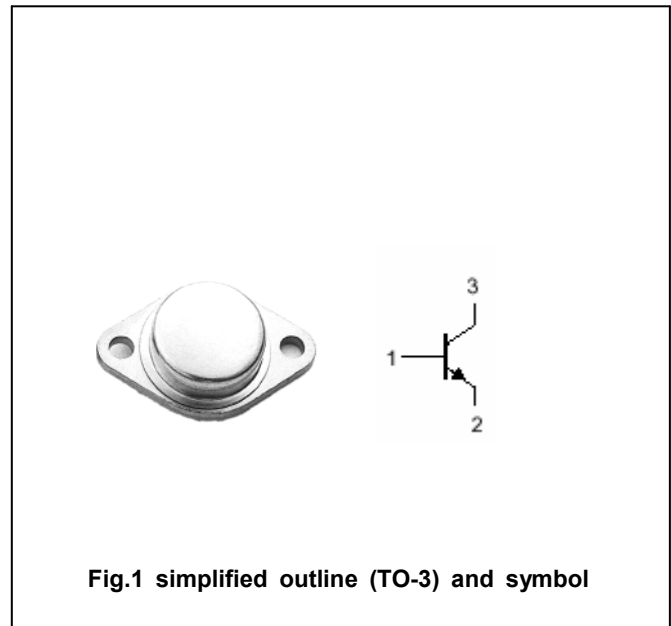


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		10	A
P_C	Collector power dissipation	$T_C=25□$	200	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R_{thj-c}	Thermal resistance junction to case	1.46	□/W

Silicon NPN Power Transistors

2SD555

CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =50mA ; I _B =0	200			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	5			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =5A; I _B =0.5A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =10A; I _B =2A			5.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =0.5A			2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =250V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V	40		200	
C _{OB}	Collector output capacitance	I _E =0 ; V _{CB} =10V; f=1MHz		300		pF
f _T	Transition frequency	I _C =1A ; V _{CE} =10V		15		MHz

PACKAGE OUTLINE

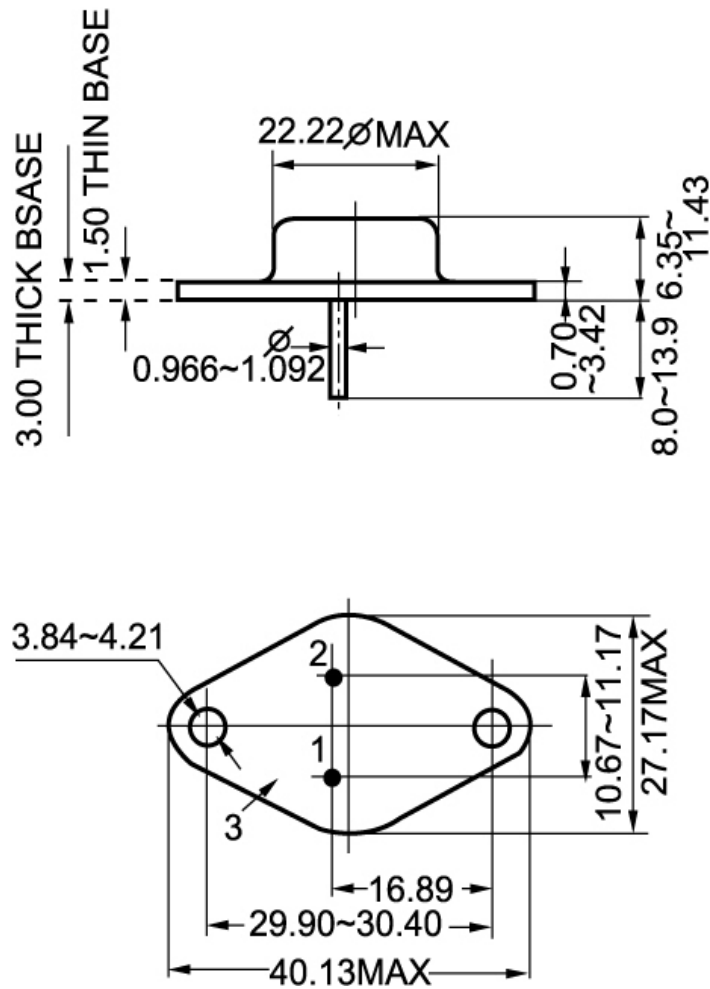


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)