

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

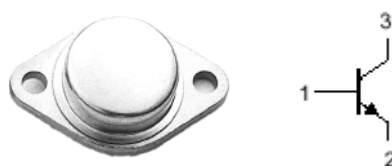


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a =$)

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
$R_{th j-C}$	Thermal resistance junction to case	1.46	/W

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CHARACTERISTICS

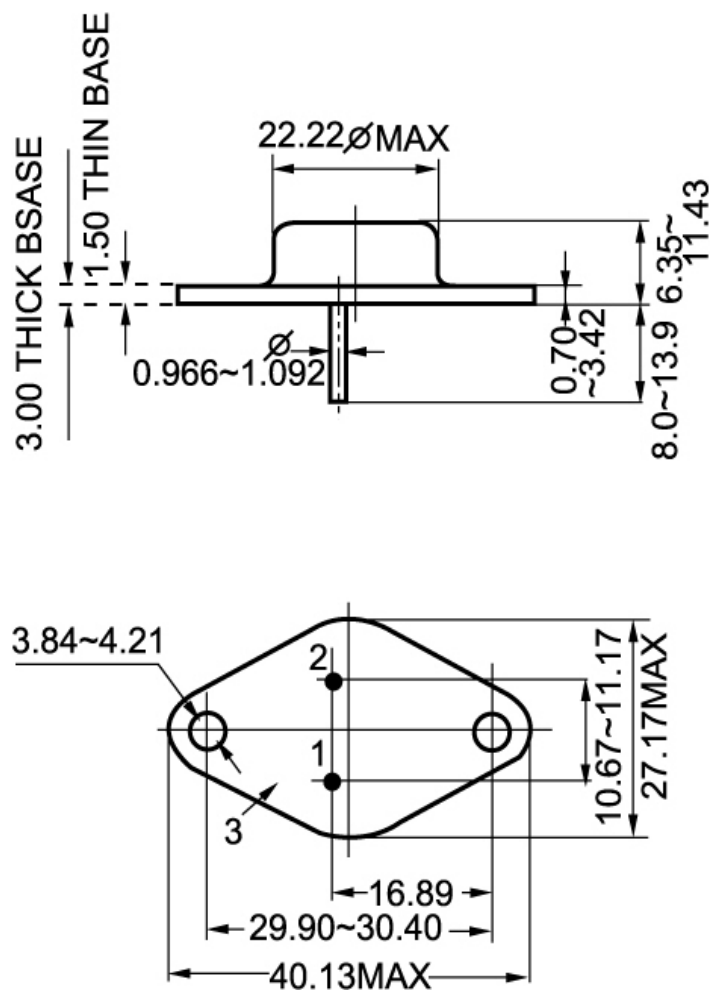
Tj=25 unless otherwise specified

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

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)