

Silicon NPN Power Transistors

2N6322

DESCRIPTION

- With TO-3 package
- High current and high power capability
- Low collector saturation voltage

APPLICATIONS

- For use in high current ,high power applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

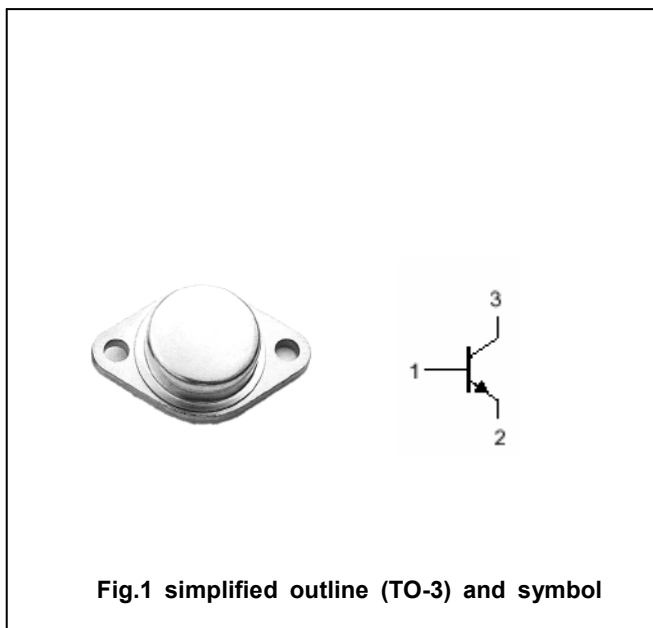


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	200	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		30	A
I_B	Base current		10	A
P_D	Total Power Dissipation	$T_C=25□$	200	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	0.5	□/W

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=30mA ; I_B=0$	200			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=2mA ; I_E=0$	300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=2mA ; I_C=0$	5			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=20A ; I_B=2A$			1.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=30A ; I_B=6A$			3.0	V
V_{BE}	Base-emitter on voltage	$I_C=30A ; V_{CE}=5V$			2.5	V
I_{CEO}	Collector cut-off current	$V_{CE}=100V ; I_B=0$			2.0	mA
I_{CES}	Collector cut-off current	$V_{CE}=300V ; V_{BE}=0$			20	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			20	μA
h_{FE-1}	DC current gain	$I_C=5A ; V_{CE}=5V$	40		150	
h_{FE-2}	DC current gain	$I_C=20A ; V_{CE}=5V$	12			
h_{FE-3}	DC current gain	$I_C=30A ; V_{CE}=5V$	6			
f_T	Transition frequency	$I_C=1A ; V_{CE}=10V$	10			MHz

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PACKAGE OUTLINE

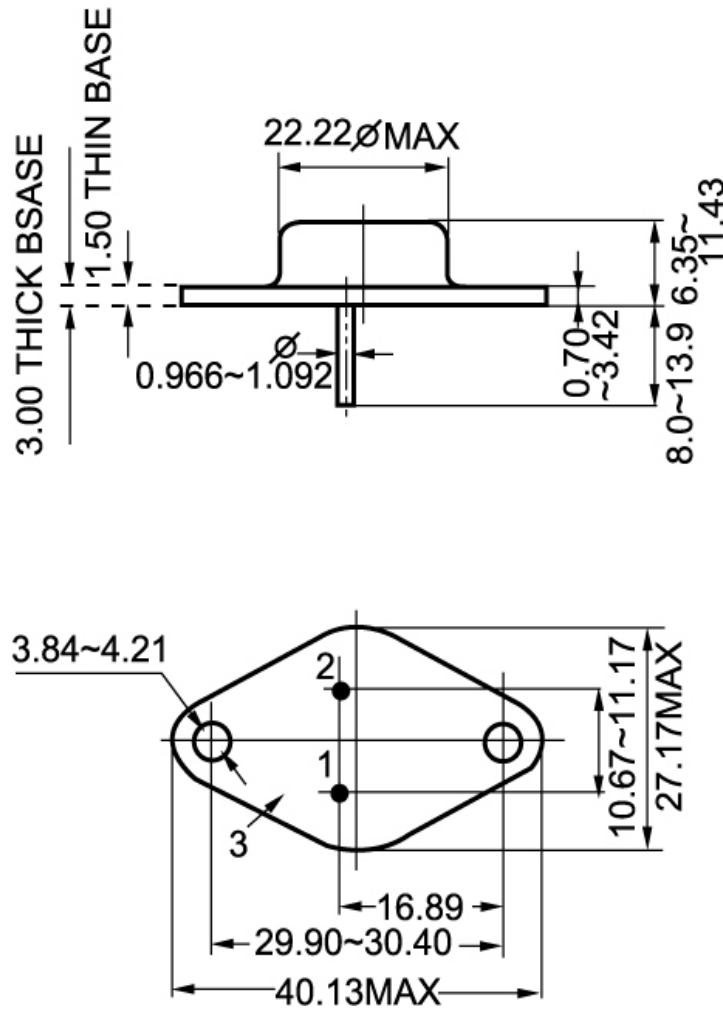


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)