

SavantIC Semiconductor

Product Specification

Silicon NPN Power Transistors

2N5632 2N5633 2N5634

DESCRIPTION

- With TO-3 package
- Low collector saturation voltage
- High DC current gain

APPLICATIONS

- For general-purpose power amplifier and switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

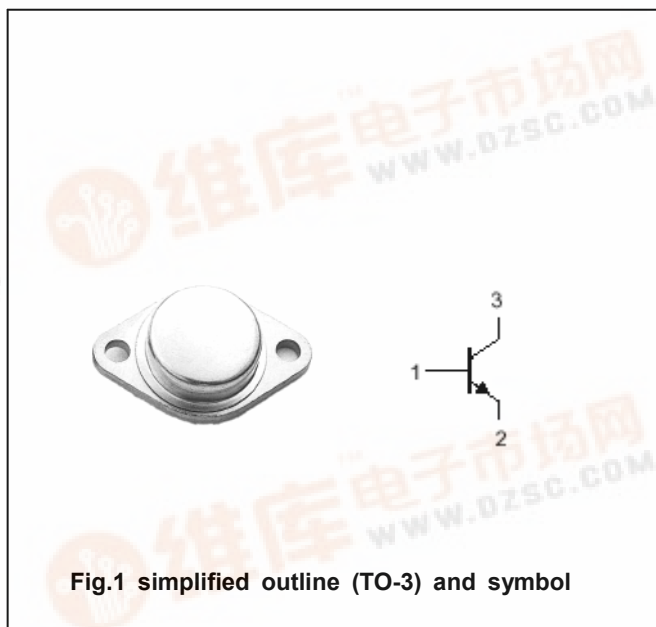


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N5632	Open emitter	100	V
		2N5633		120	
		2N5634		140	
V_{CEO}	Collector-emitter voltage	2N5632	Open base	100	V
		2N5633		120	
		2N5634		140	
V_{EBO}	Emitter-base voltage		Open collector	7	V
I_C	Collector current			10	A
P_D	Total Power Dissipation		$T_C = 25$	150	W
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.1	/W

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CHARACTERISTICS

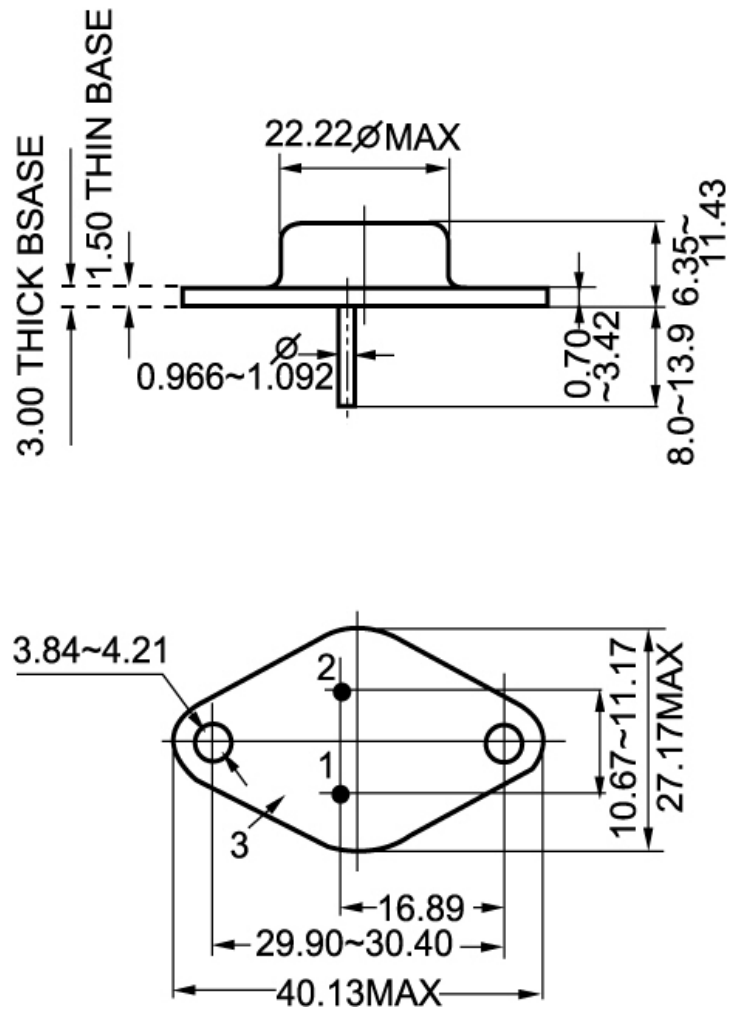
T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	2N5632	I _C =0.2A ; I _B =0	100			V
		2N5633		120			
		2N5634		140			
V _{CEsat-1}	Collector-emitter saturation voltage		I _C =7A; I _B =0.7A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage		I _C =10A ; I _B =2A			3.0	V
V _{BEsat}	Base-emitter saturation voltage		I _C =10A ; I _B =2A			2.5	V
V _{BE}	Base-emitter on voltage		I _C =5A ; V _{CE} =5V			1.5	V
I _{CEO}	Collector cut-off current	2N5632	V _{CE} =50V; I _B =0			1.0	mA
		2N5633	V _{CE} =60V; I _B =0				
		2N5634	V _{CE} =70V; I _B =0				
I _{CEV}	Collector cut-off current		V _{CE} =ratedV _{CB} ; V _{BE(off)} =1.5V T _C =150			1.0 5.0	mA
I _{EBO}	Emitter cut-off current		V _{EB} =7V; I _C =0			1.0	mA
h _{FE}	DC current gain	2N5632	I _C =5A ; V _{CE} =5V	25		100	
		2N5633		20		80	
		2N5634		15		60	
f _T	Transition frequency		I _C =1A ; V _{CE} =20V	1.0			MHz

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PACKAGE OUTLINE

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