

Silicon NPN Power Transistors

2N5632 2N5633 2N5634

DESCRIPTION

- With TO-3 package
- Low collector-emitter saturation voltage

APPLICATIONS

- For general-purpose power amplifier and switching applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

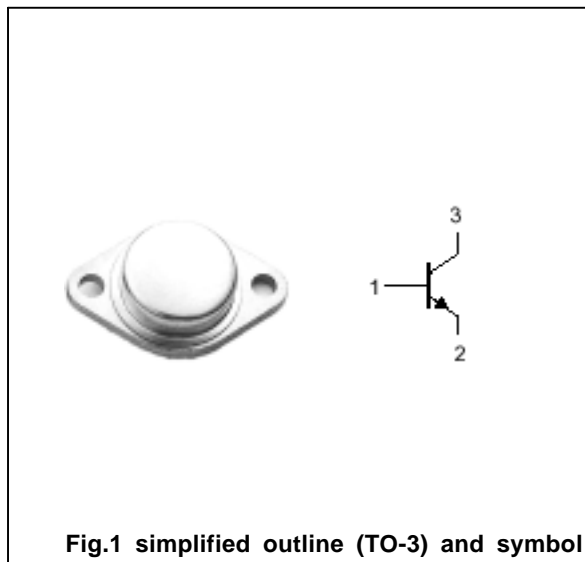


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2N5632	100	V
		2N5633	120	
		2N5634	140	
V_{CEO}	Collector-emitter voltage	2N5632	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_{thj-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 _{CEO(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}	Collector-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 _{BE(off)} =1.5V)	V _{CE} =ratedV _{CB}			1.0	mA	
		V _{CE} =ratedV _{CB} ; T _C =150			5.0		
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

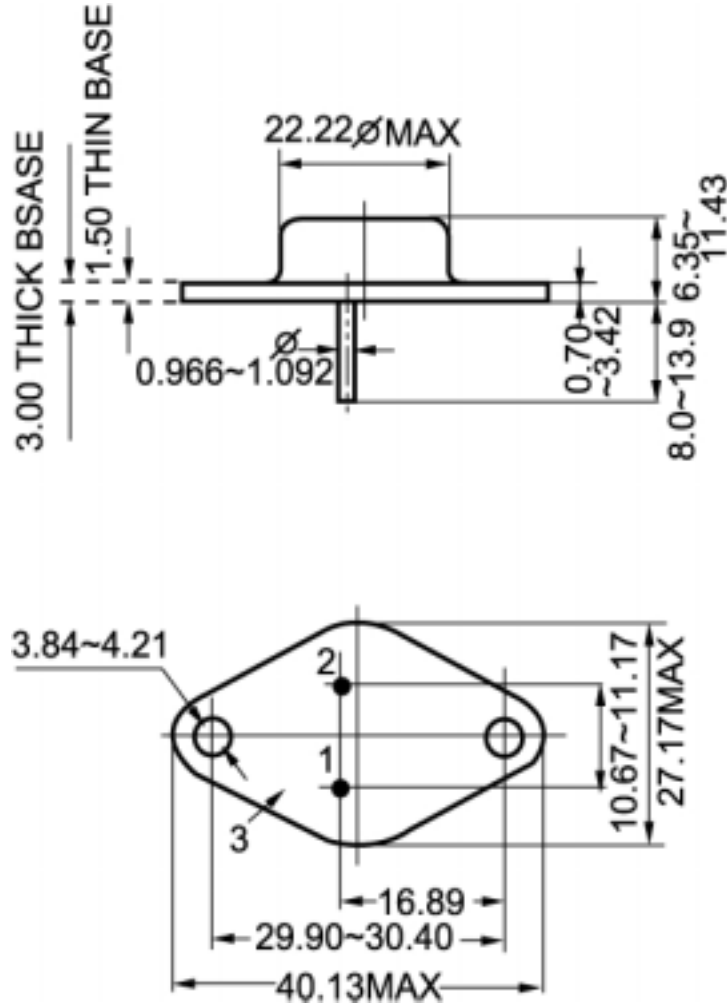


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)