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(Ta=□)

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
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.1	□/W

CHARACTERISTICS

Tj=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}	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}=rated$V_{CB;}$ $V_{BE(off)}$=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

PACKAGE OUTLINE

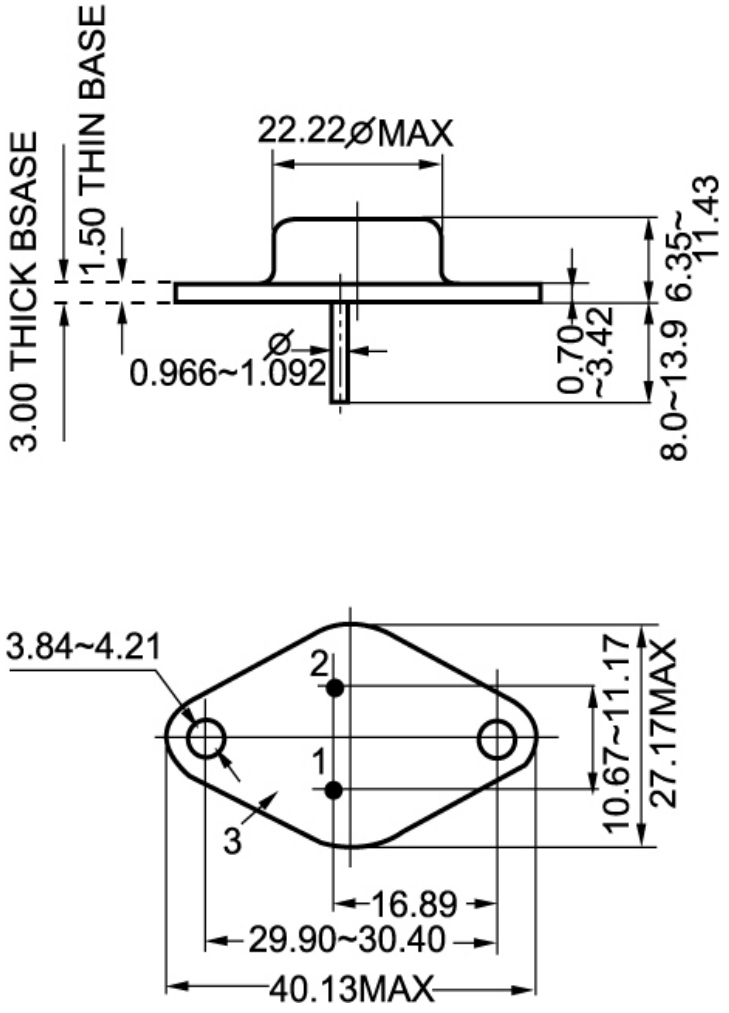

Fig.2 outline dimensions (unindicated tolerance:±0.10mm)