

## Silicon NPN Power Transistors

2N5732

## DESCRIPTION

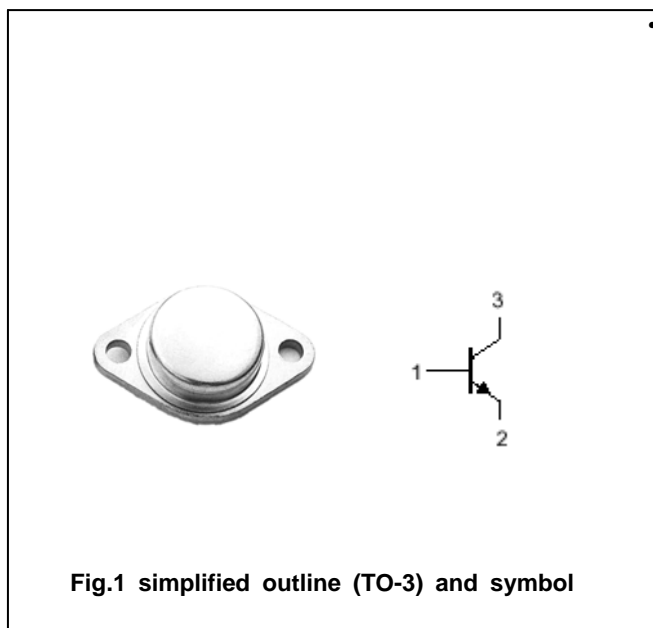
- With TO-3 package
- High current capability

## APPLICATIONS

- For linear amplifier and inductive switching applications

## PINNING(see fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	100	V
$V_{CEO}$	Collector-emitter voltage	Open base	80	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		20	A
$I_{CM}$	Collector current-peak		30	A
$P_T$	Total power dissipation	$T_C=25^\circ\text{C}$	87.5	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-65~200	$^\circ\text{C}$

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-C}$	Thermal resistance junction to case	1.17	$^\circ\text{C}/\text{W}$

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## CHARACTERISTICS

 $T_j=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2\text{A}; I_B=0$	80			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=10\text{A}; I_B=1\text{A}$			1.4	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=20\text{A}; I_B=4\text{A}$			4.0	V
$V_{BE}$	Base-emitter on voltage	$I_C=10\text{A}; V_{CE}=4\text{V}$			2.2	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=100\text{V}; I_E=0$			0.1	mA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=7\text{V}; I_C=0$			0.1	mA
$h_{FE-1}$	DC current gain	$I_C=5\text{A}; V_{CE}=2\text{V}$	30		300	
$h_{FE-2}$	DC current gain	$I_C=20\text{A}; V_{CE}=4\text{V}$	5			
$f_T$	Transition frequency	$I_C=1\text{A}; V_{CE}=10\text{V}$	30			MHz

PACKAGE OUTLINE

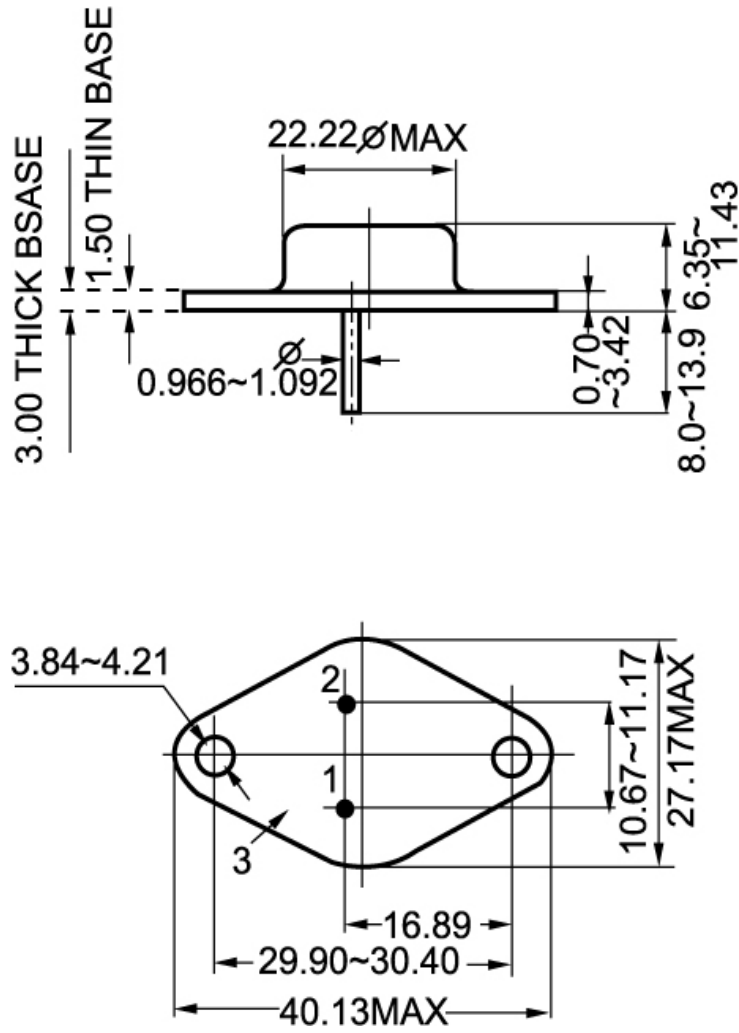


Fig.2 Outline dimensions