

## Silicon NPN Power Transistors

## 2SD905

## DESCRIPTION

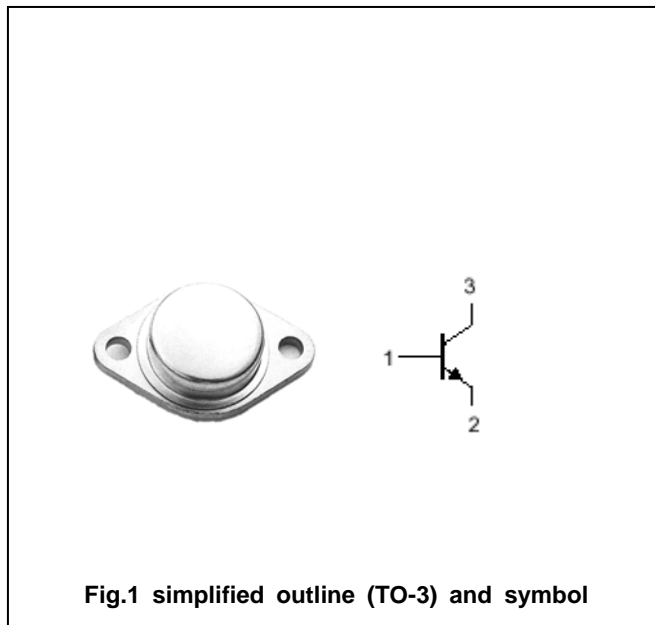
- With TO-3 package
- High voltage ,high speed

## APPLICATIONS

- For high voltage power switching TV horizontal deflection output applications

## PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings( $T_a = ^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	1400	V
$V_{CEO}$	Collector-emitter voltage	Open base	650	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		8	A
$I_{CM}$	Collector current-peak		10	A
$P_C$	Collector power dissipation	$T_C = 25^\circ\text{C}$	50	W
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-45~150	$^\circ\text{C}$

## Silicon NPN Power Transistors

## 2SD905

## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =10mA ; R <sub>BE</sub> =∞	650			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10mA ; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =8A; I <sub>B</sub> =1.5A			10	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =8A; I <sub>B</sub> =1.5A			1.5	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =1400V ; R <sub>BE</sub> =0			0.5	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			0.5	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	8		36	
t <sub>f</sub>	Fall time	I <sub>C</sub> =6.8A; I <sub>B1</sub> =1.1A; L <sub>B</sub> =0			1.0	μ s

PACKAGE OUTLINE

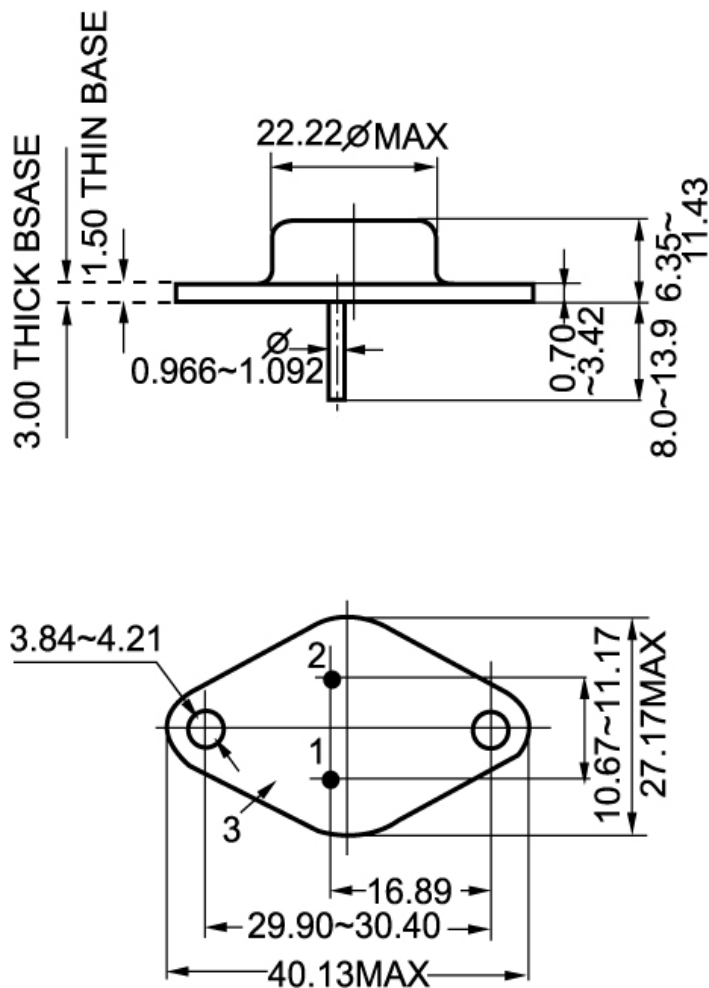


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.1$ mm)