

## Silicon NPN Power Transistors

2SD950

## DESCRIPTION

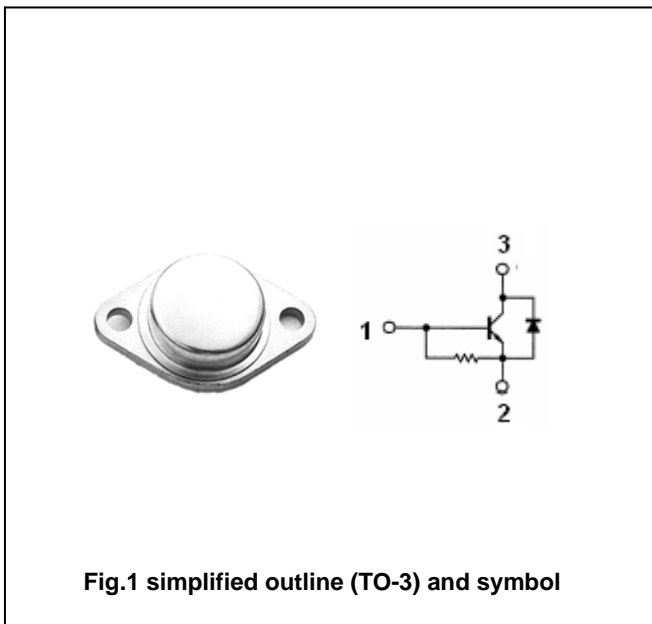
- With TO-3 package
- Built-in damper diode
- High voltage capability

## APPLICATIONS

- Line-operated 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	1500	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		3	A
$I_{CM}$	Collector current-peak		4.5	A
$P_T$	Total power dissipation	$T_C = 25^\circ\text{C}$	42	W
$T_j$	Junction temperature		130	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-65~130	$^\circ\text{C}$

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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =500m A; I <sub>C</sub> =0	5			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2 A; I <sub>B</sub> =0.75 A			5.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =2 A; I <sub>B</sub> =0.75 A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =750V; I <sub>E</sub> =0			50	μ A
		V <sub>CB</sub> =1500V; I <sub>E</sub> =0			1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	8			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =2A ; V <sub>CE</sub> =10V	3			
V <sub>F</sub>	Diode forward voltage	I <sub>F</sub> =4A			1.7	V
t <sub>f</sub>	Fall time	I <sub>C</sub> =2A; I <sub>Bend</sub> =0.75A; L <sub>B</sub> =10 μ H			0.9	μ s
t <sub>s</sub>	Storage time			11		μ s

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PACKAGE OUTLINE

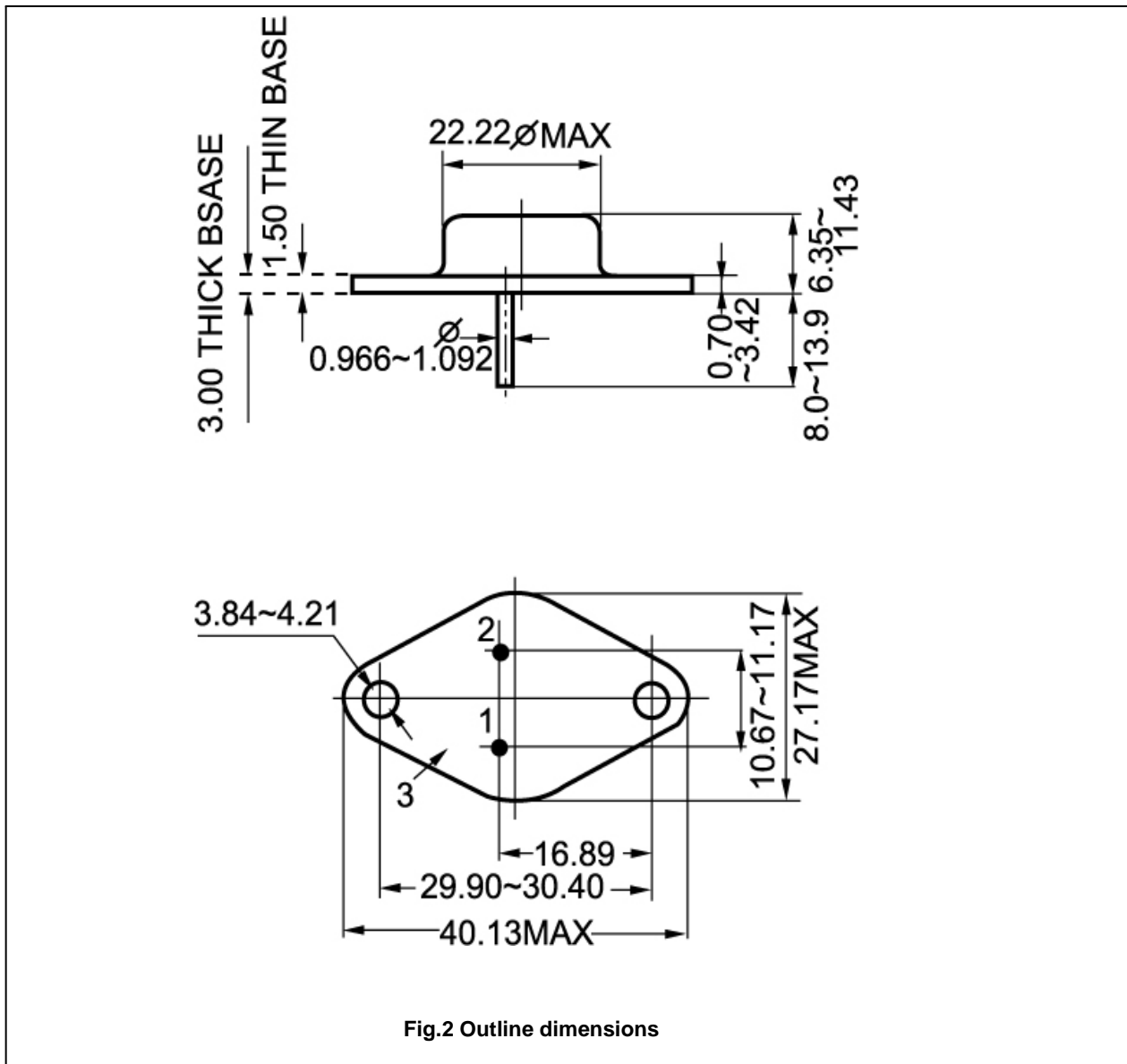


Fig.2 Outline dimensions