

Silicon NPN Power Transistors

2SD1391

DESCRIPTION

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- With TO-3PN package
- High speed switching
- High voltage,high reliability
- Wide area of safe operation

APPLICATIONS

- For horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

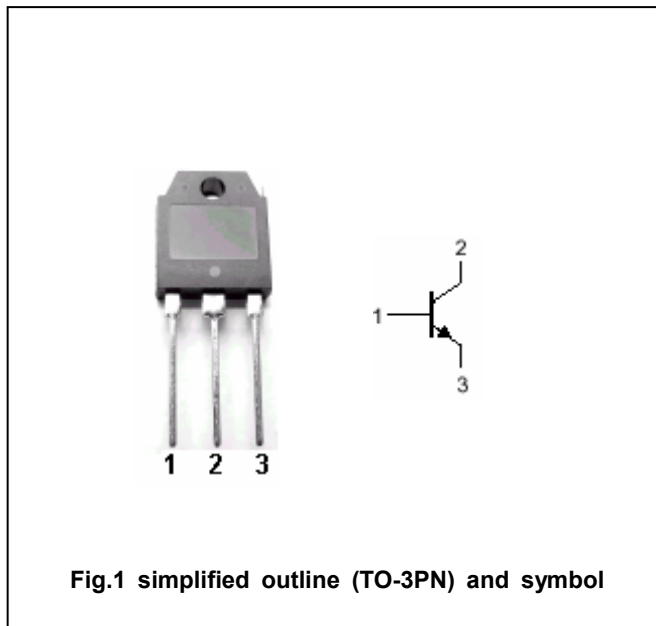


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	1500	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	700	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V
I <sub>C</sub>	Collector current (DC)		5	A
I <sub>CM</sub>	Collector current (Pulse)		17	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	100	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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## CHARACTERISTICS

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

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =100mA; I <sub>B</sub> =0	700			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA; I <sub>C</sub> =0	6			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =4.5A; I <sub>B</sub> =2A			2.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =4.5A; I <sub>B</sub> =2A			1.3	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =750V; I <sub>E</sub> =0			50	μA
		V <sub>CB</sub> =1500V; I <sub>E</sub> =0			1.0	mA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =3A; V <sub>CE</sub> =10V	4		15	
t <sub>f</sub>	Fall time	I <sub>C</sub> =4A I <sub>Bend</sub> =1.5A, L <sub>B</sub> =10μH			1.0	μs
t <sub>s</sub>	Storage time				11	μs

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PACKAGE OUTLINE

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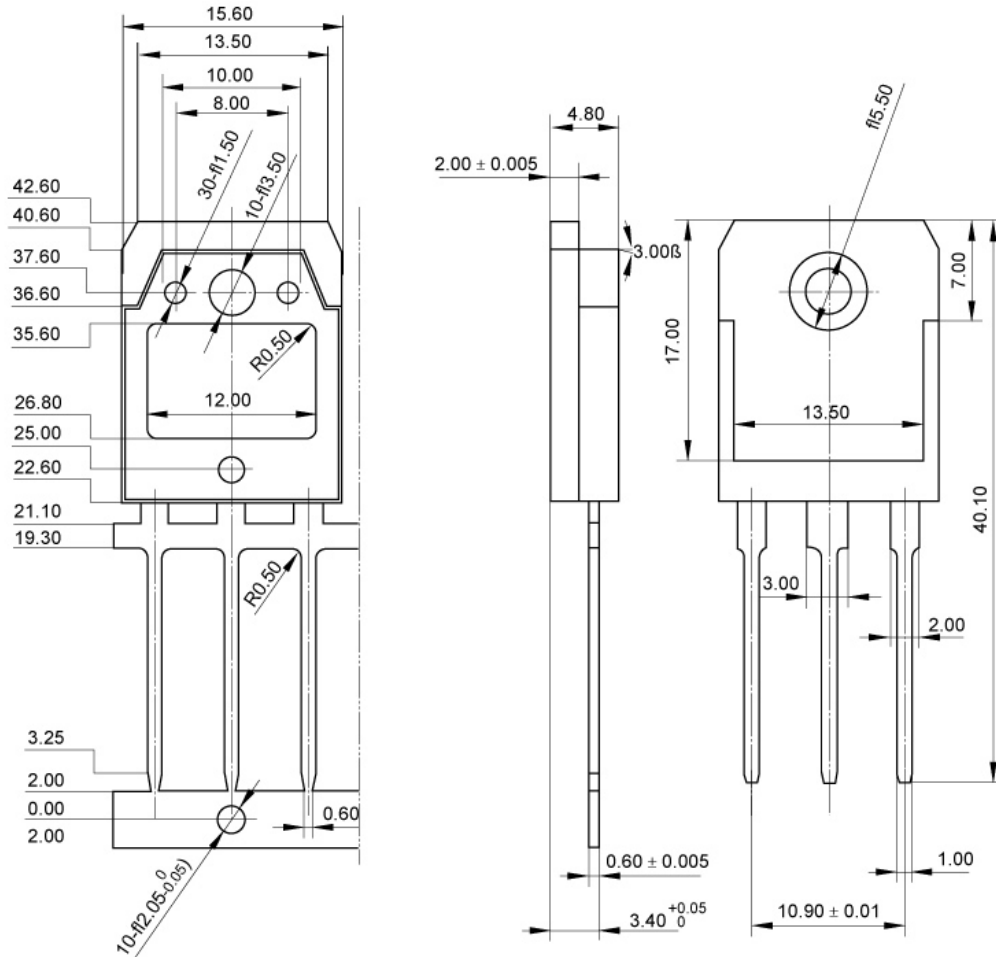


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)