

Silicon NPN Power Transistors

BU2527A

**DESCRIPTION**

- With TO-3PN package
- High voltage
- High speed switching

**APPLICATIONS**

- For use in horizontal deflection circuits of high resolution monitors.

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

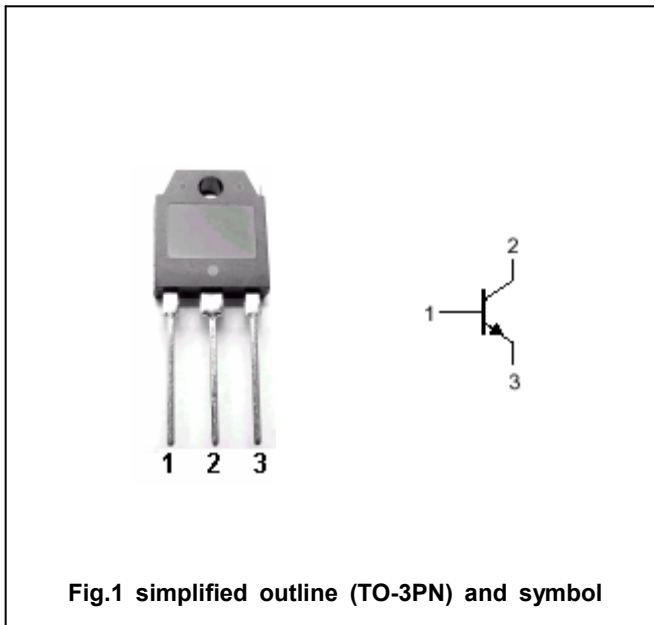


Fig.1 simplified outline (TO-3PN) and symbol

**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	800	V
I <sub>C</sub>	Collector current (DC)		12	A
I <sub>CM</sub>	Collector current-peak		30	A
I <sub>B</sub>	Base current (DC)		8	A
I <sub>BM</sub>	Base current -peak		12	A
P <sub>tot</sub>	Total power dissipation	T <sub>C</sub> =25°C	125	W
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-65~150	°C

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## CHARACTERISTICS

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

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, L=25mH	800			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA ; I <sub>C</sub> =0	7.5	13.5		V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =1.2A			5.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =1.2A			1.3	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =BV <sub>CES</sub> ; V <sub>BE</sub> =0 T <sub>j</sub> =125 °C			0.25 2.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =7.5V; I <sub>C</sub> =0			0.25	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V	6	10	21	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =6A ; V <sub>CE</sub> =5V	5	7	9	
C <sub>C</sub>	Collector capacitance	V <sub>CB</sub> =10V; I <sub>E</sub> =0; f=1.0MHz		145		pF

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PACKAGE OUTLINE

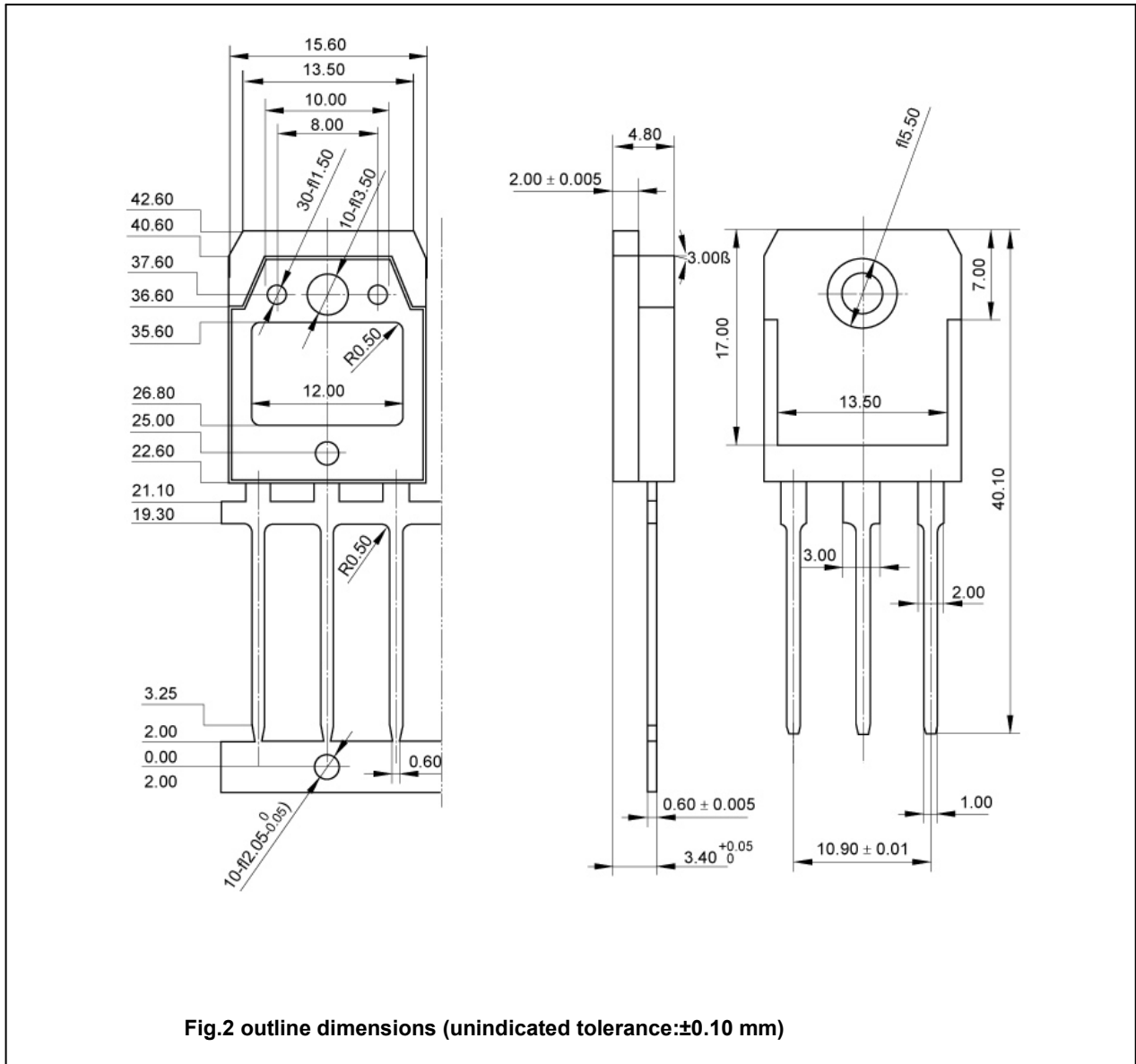


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10$  mm)