

SavantIC Semiconductor

Product Specification

Silicon PNP Power Transistors

BDV64/64A/64B/64C

DESCRIPTION

- With TO-3PN package
- Complement to type BDV65/65A/65B/65C
- DARLINGTON
- High DC current gain

APPLICATIONS

- For use in general purpose amplifier applications.

PINNING

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

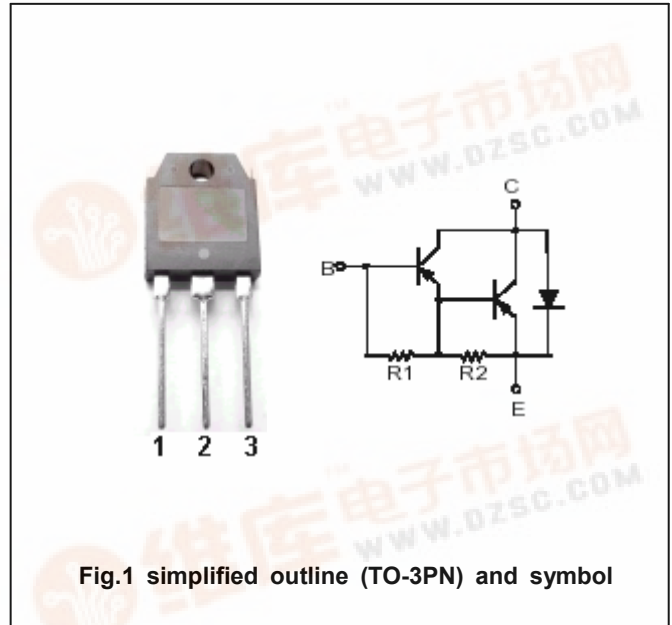


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings(Tc=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	BDV64	-60	V
		BDV64A	-80	
		BDV64B	-100	
		BDV64C	-120	
V <sub>CEO</sub>	Collector-emitter voltage	BDV64	-60	V
		BDV64A	-80	
		BDV64B	-100	
		BDV64C	-120	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-5	V
I <sub>C</sub>	Collector current		-12	A
I <sub>CM</sub>	Collector current-peak		-15	A
I <sub>B</sub>	Base current		-0.5	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25°C	125	W
		T <sub>a</sub> =25°C	3.5	
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>(BR)CEO</sub>	Collector-emitter breakdown voltage	BDV64	-60			V	
		BDV64A	-80				
		BDV64B	-100				
		BDV64C	-120				
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A, I <sub>B</sub> =-20mA			-2.0	V	
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-5A; V <sub>CE</sub> =-4V			-2.5	V	
I <sub>CBO</sub>	Collector cut-off current	BDV64	V <sub>CB</sub> =-60V, I <sub>E</sub> =0 V <sub>CB</sub> =-30V, I <sub>E</sub> =0; T <sub>C</sub> =150 °C			-0.4 -2.0	mA
		BDV64A	V <sub>CB</sub> =-80V, I <sub>E</sub> =0 V <sub>CB</sub> =-40V, I <sub>E</sub> =0; T <sub>C</sub> =150 °C			-0.4 -2.0	
		BDV64B	V <sub>CB</sub> =-100V, I <sub>E</sub> =0 V <sub>CB</sub> =-50V, I <sub>E</sub> =0; T <sub>C</sub> =150 °C			-0.4 -2.0	
		BDV64C	V <sub>CB</sub> =-120V, I <sub>E</sub> =0 V <sub>CB</sub> =-60V, I <sub>E</sub> =0; T <sub>C</sub> =150 °C			-0.4 -2.0	
I <sub>CEO</sub>	Collector cut-off current	BDV64	V <sub>CE</sub> =-30V, I <sub>B</sub> =0			-2	mA
		BDV64A	V <sub>CE</sub> =-40V, I <sub>B</sub> =0				
		BDV64B	V <sub>CE</sub> =-50V, I <sub>B</sub> =0				
		BDV64C	V <sub>CE</sub> =-60V, I <sub>B</sub> =0				
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-5	mA	
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =-5A; V <sub>CE</sub> =-4V	1000				
V <sub>EC</sub>	Diode forward voltage	I <sub>E</sub> =-10A			-3.5	V	

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal resistance junction to case	1.0	°C/W

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PACKAGE OUTLINE

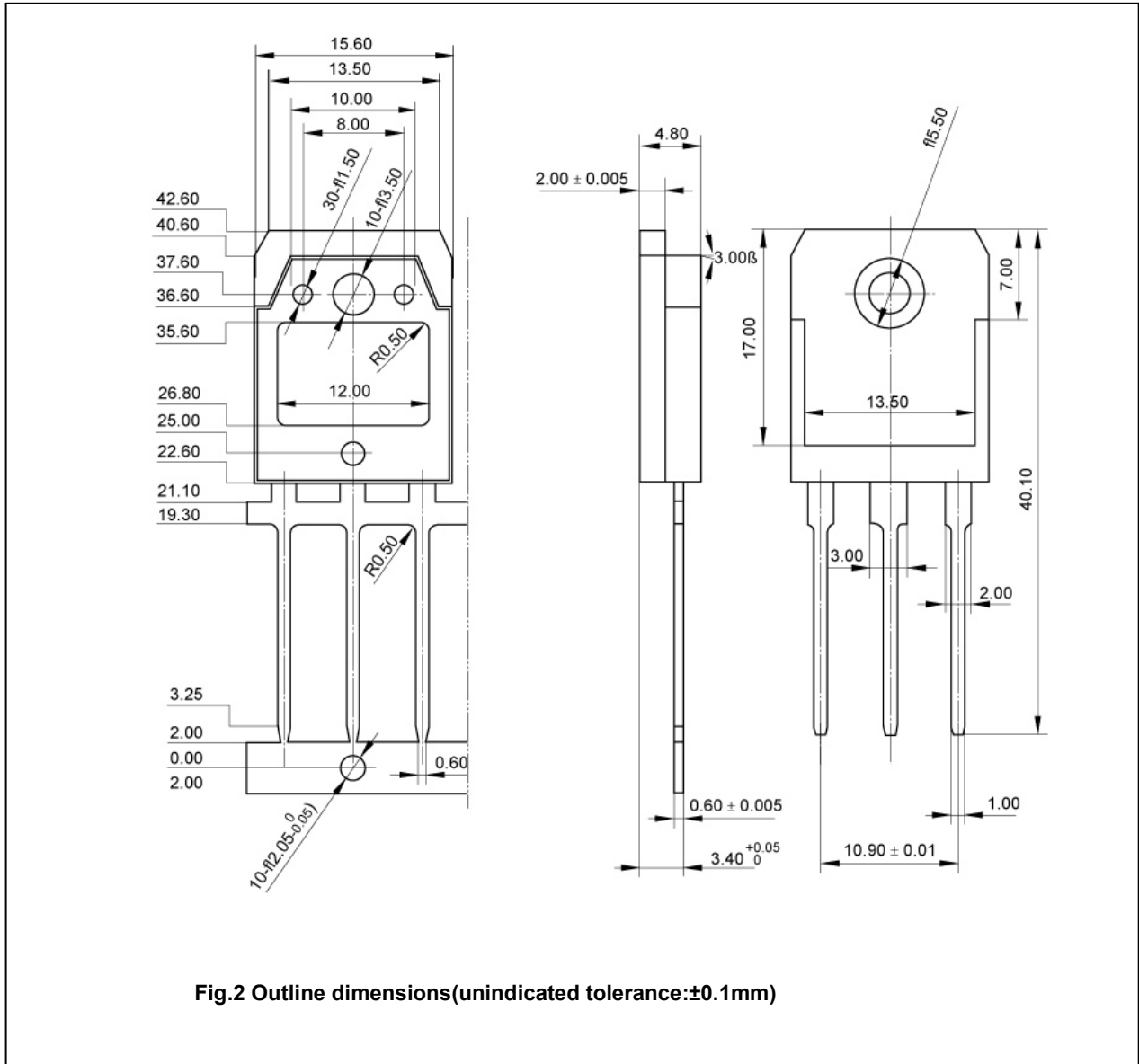


Fig.2 Outline dimensions(unindicated tolerance:±0.1mm)