

**Silicon NPN Power Transistors**

**2SC2975**

**DESCRIPTION**

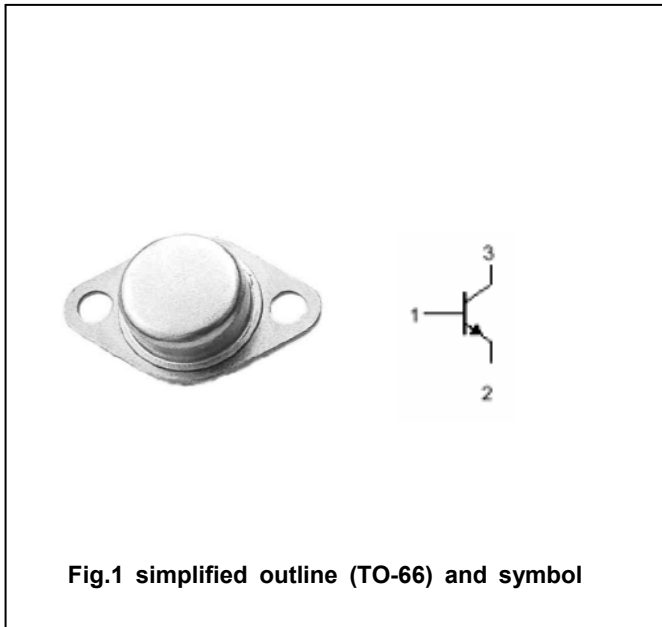
- With TO-66 package
- High breakdown voltage
- Fast switching speed.

**APPLICATIONS**

- For switching regulator applications
- General purpose power amplifier

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**Fig.1 simplified outline (TO-66) and symbol**

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	800	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	400	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		5	A
P <sub>T</sub>	Total power dissipation	T <sub>C</sub> =25℃	40	W
T <sub>j</sub>	Junction temperature		175	℃
T <sub>stg</sub>	Storage temperature		-55~175	℃

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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	I <sub>C</sub> =5mA ; R <sub>BE</sub> =∞	400			V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =1mA ; I <sub>E</sub> =0	800			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =1mA ; I <sub>C</sub> =0	7			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =2A ; I <sub>B</sub> =0.3A			1.0	V
V <sub>BEsat</sub>	Base-emitter saturation voltage	I <sub>C</sub> =2A ; I <sub>B</sub> =0.3A			1.5	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =640V ; I <sub>E</sub> =0			30	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V ; I <sub>C</sub> =0			10	μA
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =2A ; V <sub>CE</sub> =5V	10		35	

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PACKAGE OUTLINE



Fig.2 Outline dimensions