

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

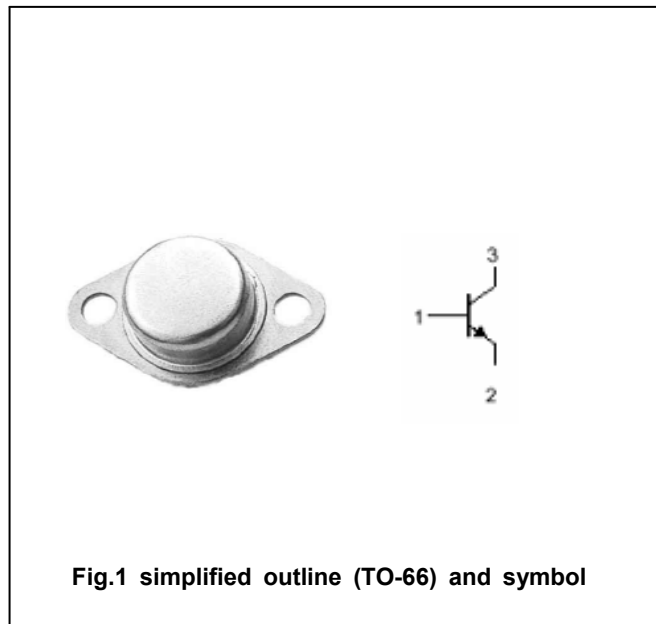


Fig.1 simplified outline (TO-66) and symbol

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	800	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		5	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature		175	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~175	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =5mA ; R _{BE} =∞	400			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	800			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A ; I _B =0.3A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A ; I _B =0.3A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =640V ; I _E =0			30	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			10	μA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V	10		35	

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PACKAGE OUTLINE

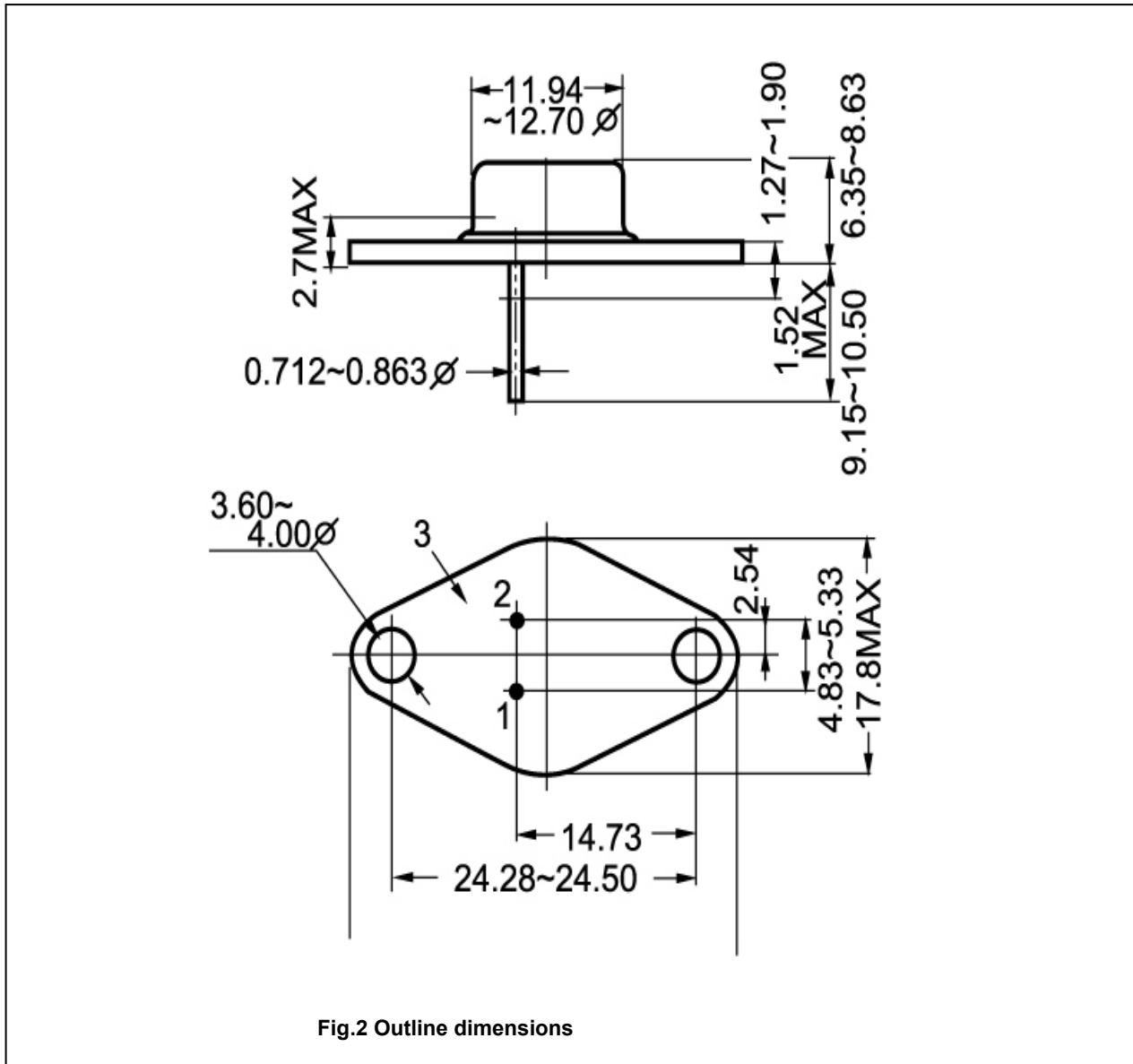


Fig.2 Outline dimensions