

Silicon NPN Power Transistors

2SC1863

DESCRIPTION

- With TO-66 package
- Continuous collector current- $I_C=7A$
- Power dissipation $-P_C=40W @T_C=25^\circ C$

APPLICATIONS

- Designed for general-purpose amplifier and switching applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

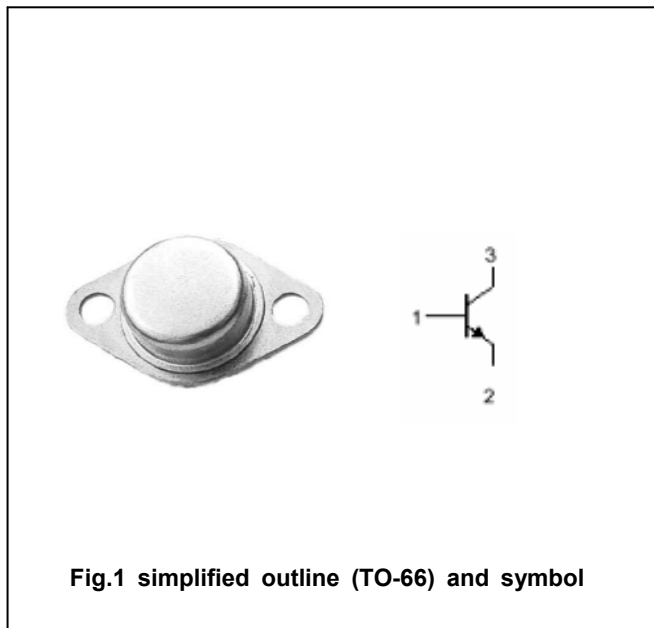


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings($T_a=25^\circ C$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		7	A
P_T	Total power dissipation	$T_C=25^\circ C$	40	W
T_j	Junction temperature		150	$^\circ C$
T_{stg}	Storage temperature		-55~150	$^\circ C$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0	100			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =1A ; I _B =0.1A			0.5	V
V _{BE}	Base-emitter on voltage	I _C =1A ; V _{CE} =2V			1.0	V
I _{CBO}	Collector cut-off current	V _{CB} =150V ; I _E =0			100	μA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			100	μA
h _{FE-1}	DC current gain	I _C =3A ; V _{CE} =5V	20			
h _{FE-2}	DC current gain	I _C =5A ; V _{CE} =5V	15			

PACKAGE OUTLINE



Fig.2 Outline dimensions