

Silicon NPN Power Transistors

2SD665

DESCRIPTION

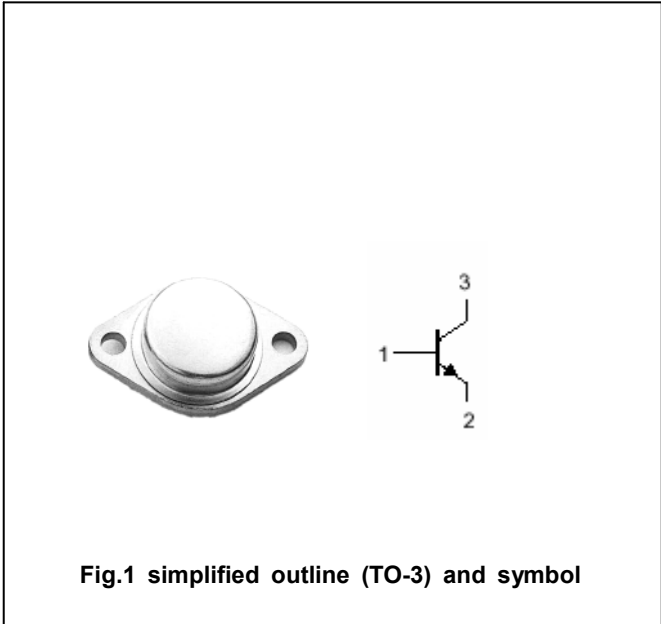
- With TO-3 package
- Complement to type 2SB645
- High power dissipation

APPLICATIONS

- Power amplifier applications
- Power switching applications
- DC-DC converters

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	200	V
V _{CEO}	Collector-emitter voltage	Open base	200	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		15	A
I _B	Base current		4	A
P _C	Collector power dissipation	T _C =25□	150	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-55~150	□

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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 =25mA ; I _B =0	200			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =10A; I _B =1A			2.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =10A; I _B =1A			2.5	V
I _{CBO}	Collector cut-off current	V _{CB} =200V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	40		140	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V; f=1.0MHz		300		pF
f _T	Transition frequency	I _C =1A ; V _{CE} =5V		15		MHz

◆ h_{FE} Classifications

O	R
40-80	70-140

PACKAGE OUTLINE



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