

Silicon NPN Power Transistors

DESCRIPTION

- With TO-66 package
- Wide area of operation
- High sustaining voltage

APPLICATIONS

- For high-speed switching and linear-amplifier applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

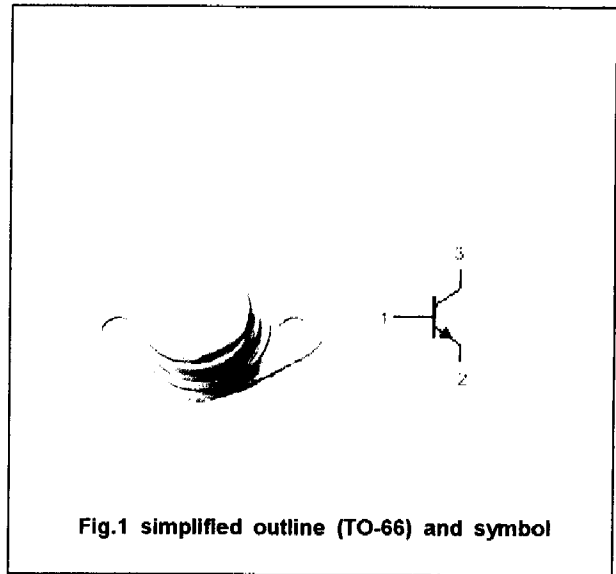


Fig.1 simplified outline (TO-66) and symbol

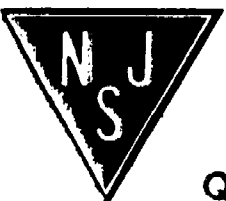
Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CB0}	Collector-base voltage	Open emitter	120	V
V _{CE0}	Collector-emitter voltage	Open base	90	V
V _{EBO}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		4	A
I _{CM}	Collector current-peak		5	A
I _B	Base current		3	A
P _T	Total power dissipation	T _C =25°C	35	W
T _J	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th-j-c}	Thermal resistance junction to case	5.0	°C/W

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Silicon NPN Power Transistors

2N6500

CHARACTERISTICS

T_J=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =0.2 A; I _B =0	90			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A; I _B =0.3A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =3A; I _B =0.3A			2.5	V
I _{CEV}	Collector cut-off current	V _{CE} =110V; V _{BE(off)} =-1.5V T _C =150°C			5.0 10	mA
I _{CEO}	Collector cut-off current	V _{CE} =70V; I _B =0			5.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			25	mA
h _{FE}	DC current gain	I _C =3A; V _{CE} =2V	15		60	
C _{OB}	Output capacitance	I _E =0; V _{CB} =10V; f=1MHz			175	pF

