

Silicon NPN Power Transistors

2N6513

DESCRIPTION

- With TO-3 package
- High breakdown voltage
- Low collector saturation voltage

APPLICATIONS

- For use in switching power supply applications and other inductive switching circuits

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

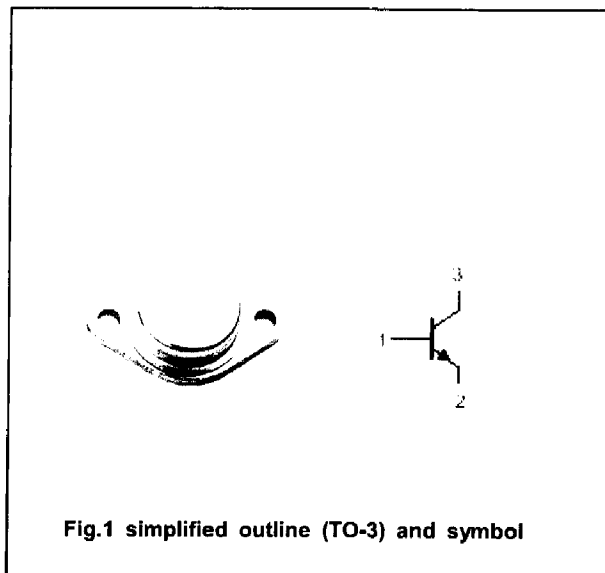


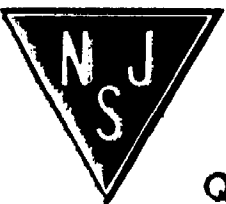
Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CB0}	Collector-base voltage	Open emitter	400	V
V _{CE0}	Collector-emitter voltage	Open base	350	V
V _{EB0}	Emitter-base voltage	Open collector	7	V
I _C	Collector current		7	A
I _{CM}	Collector current-peak		14	A
P _D	Total power dissipation	T _C =25	120	W
T _J	Junction temperature		150	
T _{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th-j-c}	Thermal resistance junction to case	1.25	/W



NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Silicon NPN Power Transistors

2N6513

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A; I _B =0	350			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =3A; I _B =0.4A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =5A; I _B =1A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A; I _B =1A			1.5	V
I _{CES}	Collector cut-off current	V _{CE} =400V; V _{BE(off)} =-1.5V T _C =100			0.1 1.5	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =4A; V _{CE} =3V	10		50	
f _T	Transition frequency	I _C =0.5A; V _{CE} =10V		3		MHz

