

Silicon NPN Power Transistors

2N6753 2N6754

DESCRIPTION

- With TO-3 package
- High breakdown voltage
- Low saturation voltage
- Fast switching speed

APPLICATIONS

- Off-line power supplies
- High-voltage inverters
- Switching regulators

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

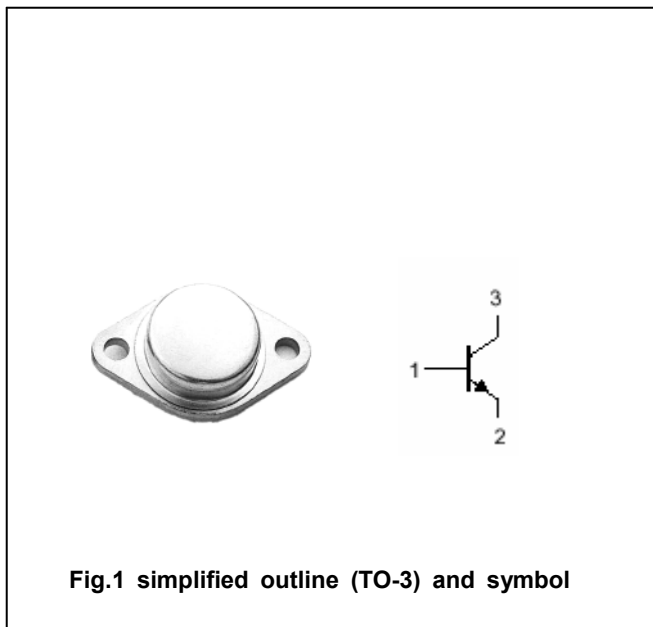


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2N6753	900	V
		2N6754	1000	
V _{CEO}	Collector-emitter voltage	Open base	500	V
V _{EBO}	Emitter-base voltage	Open collector	8	V
I _C	Collector current		10	A
I _B	Base current		5	A
P _D	Total Power Dissipation	T _C =25□	150	W
T _j	Junction temperature		-65~175	□
T _{stg}	Storage temperature		-65~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance junction to case	1.0	□/W

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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 =0.2A ; I _B =0	500			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =5A ; I _B =1A			1.0	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =10A ; I _B =3A			3.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =1A			1.3	V
I _{CEV}	Collector cut-off current	2N6753			0.1	mA
					1.0	
I _{CEV}	Collector cut-off current	2N6754			0.1	mA
					1.0	
I _{EBO}	Emitter cut-off current	V _{EB} =8V ; I _C =0			2.0	mA
h _{FE}	DC current gain	I _C =5A ; V _{CE} =3V	8		40	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =10V ; f=0.1MHz	50		250	pF
f _T	Transition frequency	I _C =0.2A ; V _{CE} =10V	15		60	MHz

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.10mm)