

Silicon NPN Power Transistors

2N6254

DESCRIPTION

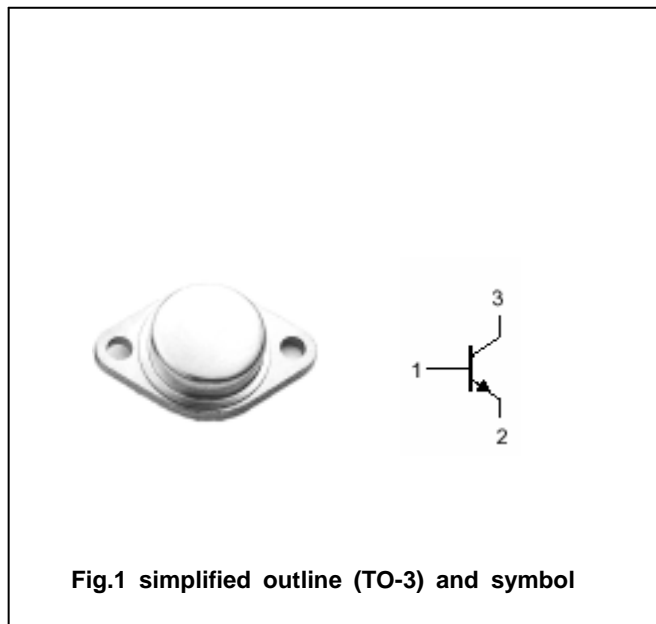
- With TO-3 package
- Low collector saturation voltage
- Wide safe operating area
- High dissipation capability

APPLICATIONS

- Series and shunt regulators
- High fidelity amplifiers
- Power switching circuits

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a =$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		15	A
I_B	Base current		7	A
P_D	Total Power Dissipation	$T_C = 25$	115	W
T_j	Junction temperature		200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.17	/W

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CHARACTERISTICS

 $T_j=25$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2A ; I_B=0$	80			V
$V_{CEsat-1}$	Collector-emitter saturation voltage	$I_C=5A ; I_B=0.5A$			0.5	V
$V_{CEsat-2}$	Collector-emitter saturation voltage	$I_C=15A ; I_B=3A$			4.0	V
V_{BE}	Base-emitter on voltage	$I_C=5A ; V_{CE}=2V$			1.5	V
I_{CEO}	Collector cut-off current	$V_{CE}=60V ; I_B=0$			1.0	mA
I_{CEX}	Collector cut-off current	$V_{CE}=100V ; V_{BE}=-1.5V$ $T_C=150$			0.5 5.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V ; I_C=0$			0.5	mA
h_{FE-1}	DC current gain	$I_C=5A ; V_{CE}=2V$	20		70	
h_{FE-2}	DC current gain	$I_C=15A ; V_{CE}=4V$	5			

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PACKAGE OUTLINE

