

Silicon NPN Power Transistors

2N5559

DESCRIPTION

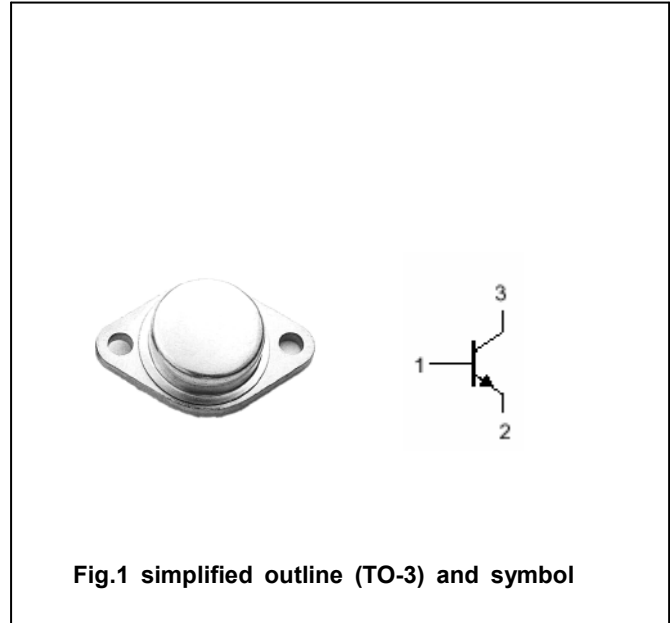
- With TO-3 package
- Excellent safe operating area

APPLICATIONS

- For industrial and commercial equipment including high fidelity audio amplifiers, series and shunt regulators and power switches applications

PINNING

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
P_C	Collector power dissipation	$T_c = 25 \square$	100	W
T_j	Junction temperature		150	\square
T_{stg}	Storage temperature		-65~200	\square

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.5	\square/W

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-emitter sustaining voltage	I _C =0.2A ; I _B =0	120			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =10A ; I _B =2A			5.0	V
V _{BE}	Base-emitter on voltage	I _C =10A ; V _{CE} =4V			5.7	V
I _{CEO}	Collector cut-off current	V _{CE} =140V ; I _B =0			5.0	mA
I _{CEX}	Collector cut-off current	V _{CE} =120V ; V _{BE(off)} =1.5V T _C =150°C			2.0 10	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			2.0	mA
h _{FE}	DC current gain	I _C =4A ; V _{CE} =2V	12		60	

PACKAGE OUTLINE

