

Silicon NPN Power Transistors

2SC3853

DESCRIPTION

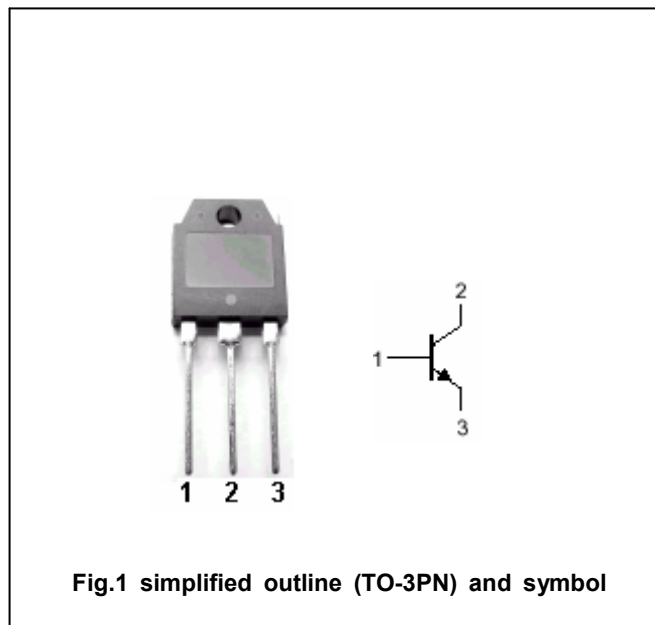
- With TO-3PN package
- Complement to type 2SA1489

APPLICATIONS

- Audio and general purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	80	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		6	A
P_C	Collector power dissipation	$T_C = 25 \square$	60	W
T_j	Junction temperature		150	$\square$
T_{stg}	Storage temperature		-55~150	$\square$

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CHARACTERISTICS

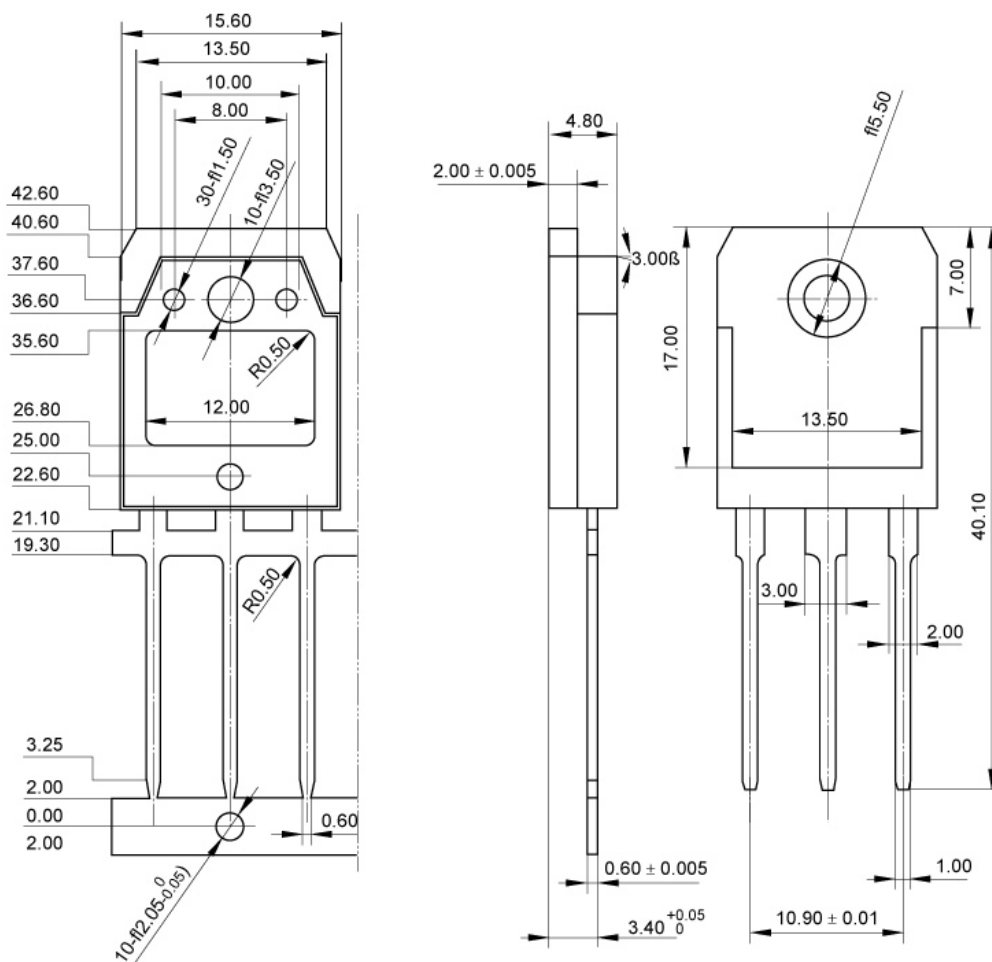
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA ; I_B=0$	80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	6			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=2A ; I_B=0.2A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=120V ; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V ; I_C=0$			100	μA
h_{FE}	DC current gain	$I_C=2A ; V_{CE}=4V$	50			
f_T	Transition frequency	$I_C=0.5A ; V_{CE}=12V$		20		MHz

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)