

Silicon NPN Power Transistors

2SC4385

**DESCRIPTION**

- With TO-3PML package
- Complement to type 2SA1670

**APPLICATIONS**

- Audio and general purpose

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

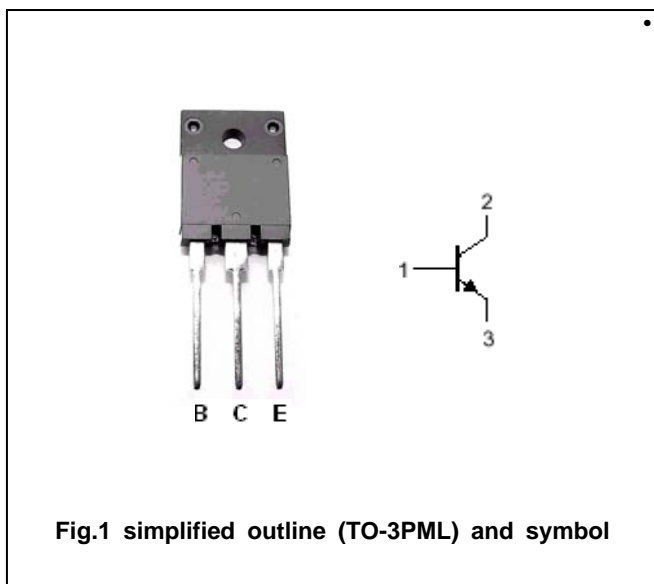


Fig.1 simplified outline (TO-3PML) and symbol

**Absolute maximum ratings(Ta=25°C)**

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
$I_B$	Base current		3	A
$P_C$	Collector power dissipation	$T_C=25^\circ\text{C}$	60	W
$T_j$	Junction temperature		150	°C
$T_{stg}$	Storage temperature		-55~150	°C

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## CHARACTERISTICS

 $T_j=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50\text{mA}; I_B=0$	80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}; I_C=0$	6			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=2\text{A}; I_B=0.2\text{A}$			1.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=120\text{V}; I_E=0$			10	$\mu\text{A}$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=6\text{V}; I_C=0$			10	$\mu\text{A}$
$h_{FE}$	DC current gain	$I_C=2\text{A}; V_{CE}=4\text{V}$	50		180	
$f_T$	Transition frequency	$I_E=-0.5\text{A}; V_{CE}=12\text{V}$		20		MHz

◆  $h_{FE}$  classifications

O	P	Y
50-100	70-140	90-180

