

Silicon NPN Power Transistors

2SC4303

DESCRIPTION

- With TO-3PML package
- High voltage switching transistor

APPLICATIONS

- Switching Regulator,
- Lighting Inverter and general purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

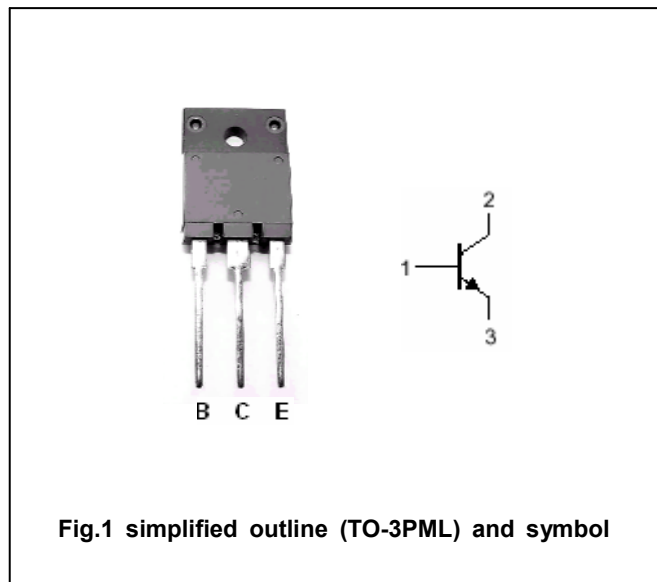


Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1400	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		6	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon NPN Power Transistors**2SC4303****CHARACTERISTICS****Tj=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10mA; I_B=0$	800			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=2.5A; I_B=0.5A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=2.5A; I_B=0.5A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=1200V; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V; I_C=0$			100	μA
h_{FE}	DC current gain	$I_C=2.5A; V_{CE}=4V$	6			
f_T	Transition frequency	$I_E=0.5A; V_{CE}=12V$		4		MHz

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PACKAGE OUTLINE

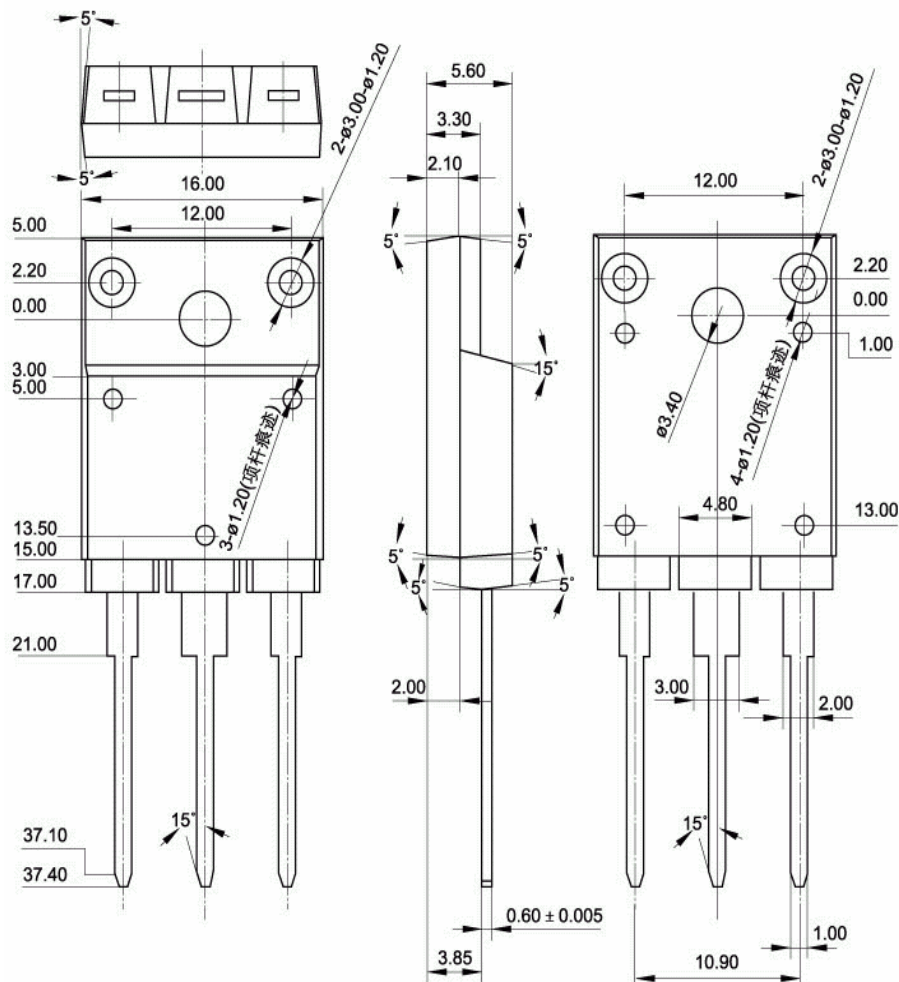


Fig.2 Outline dimensions