

Silicon NPN Power Transistors

2SC4585

DESCRIPTION

- With TO-3PML package
- High voltage,high speed
- Switching power transistor

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

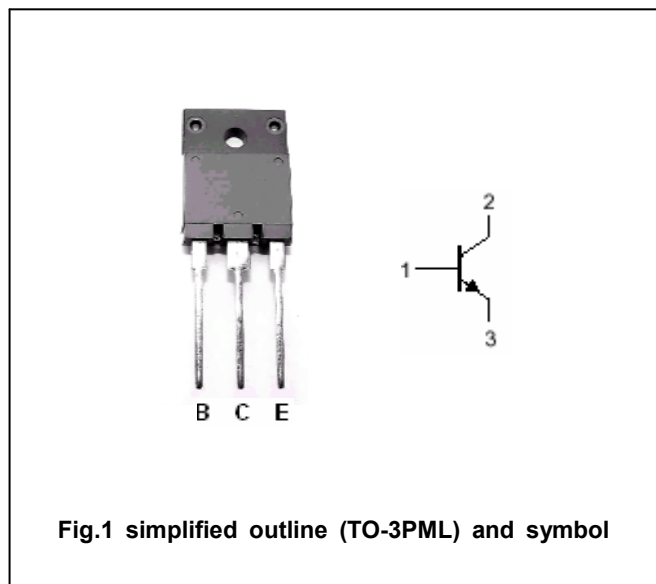


Fig.1 simplified outline (TO-3PML) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1200	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		20	A
I_B	Base current		4	A
I_{BM}	Base current-peak		8	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	85	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.47	$^\circ\text{C/W}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A; I_B=1A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A; I_B=1A$			1.5	V
$V_{CEQ(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2A; I_B=0$	800			V
I_{EBO}	Emitter cut-off current	At rated voltage			0.1	mA
I_{CBO}	Collector cut-off current	At rated voltage			0.1	mA
I_{CEO}	Collector cut-off current					
h_{FE-1}	DC current gain	$I_C=5A; V_{CE}=5V$	8			
h_{FE-2}	DC current gain	$I_C=1mA; V_{CE}=5V$	7			
f_T	Transition frequency	$I_C=1A; V_{CE}=10V$		8		MHz

Switching times

t_{on}	Turn-on time	$I_C=5A; R_L=50\Omega$ $I_{B1}=1A; I_{B2}=2A$ $V_{BB2}=4V$			0.5	μs
t_{stg}	Storage time				3.5	μs
t_f	Fall time				0.3	μs

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PACKAGE OUTLINE

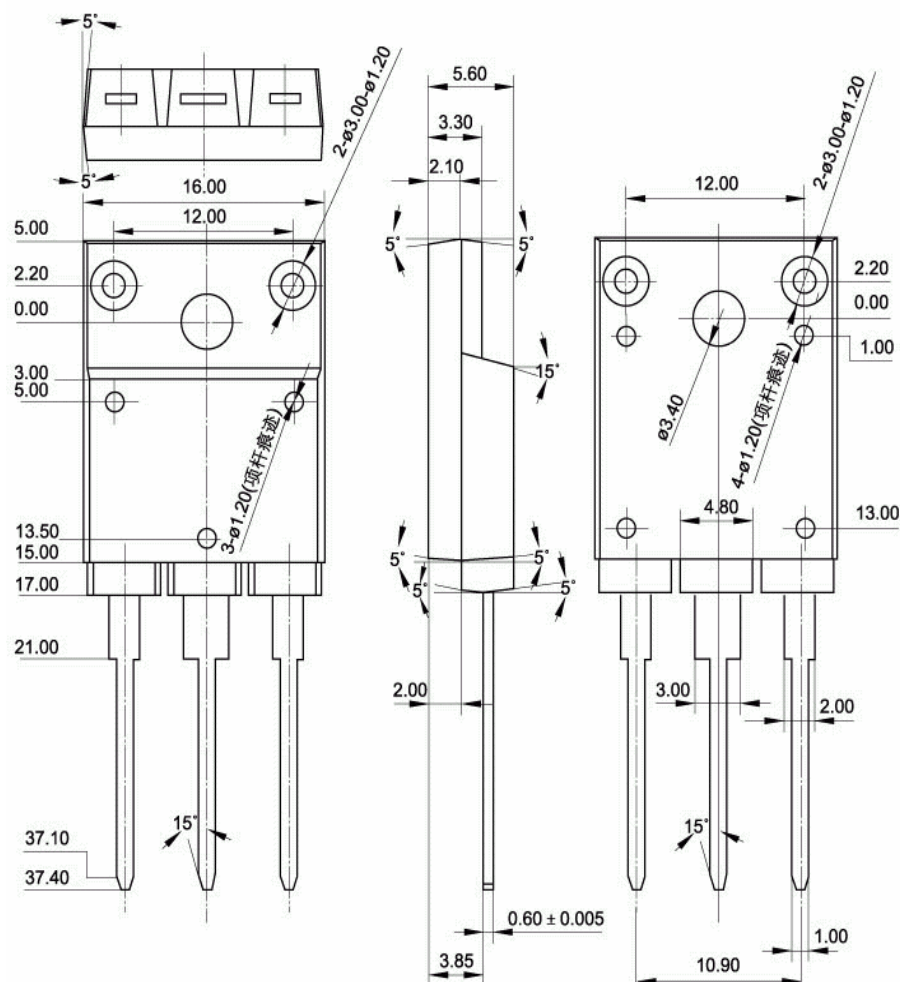


Fig.2 Outline dimensions