

Silicon NPN Power Transistors

2SC2834 2SC2834A

DESCRIPTION

- With TO-3PN package
- High speed switching
- High V_{CBO}
- Low collector saturation voltage

APPLICATIONS

- For high speed switching applications

PINNING

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

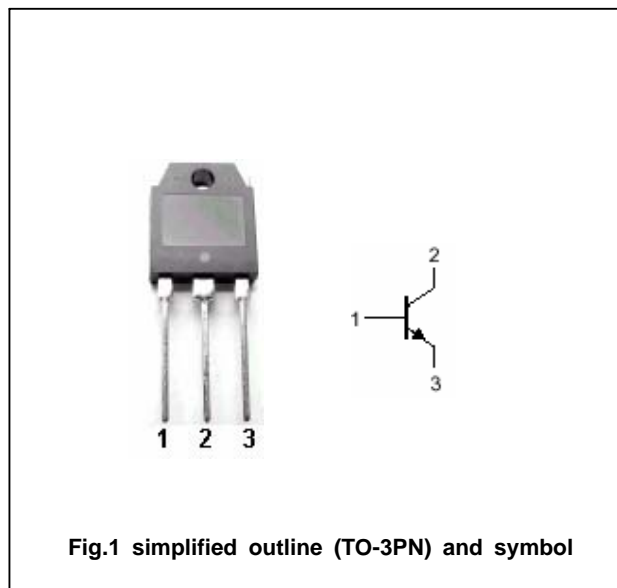


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings ($T_a=25$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC2834	800	V
		2SC3834A	900	
V_{CEO}	Collector-emitter voltage	Open base	500	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current (DC)		7	A
I_{CM}	Collector current-peak		15	A
I_B	Base current (DC)		4	A
P_C	Collector power dissipation	$T_a=25$	2.5	W
		$T_C=25$	100	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage		I _C =0.2A ; L=25mH	500			V
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
I _{CBO}	Collector cut-off current	2SC2834	V _{CB} =800V ; I _E =0			0.1	mA
		2SC3834A	V _{CB} =900V ; I _E =0				
I _{EBO}	Emitter cut-off current		V _{EB} =5V ; I _C =0			0.1	mA
h _{FE-1}	DC current gain		I _C =0.1A ; V _{CE} =5V	15			
h _{FE-2}	DC current gain		I _C =5A ; V _{CE} =5V	8			
f _T	Transition frequency		I _C =0.5A ; V _{CE} =10V ; f=1MHz		3.5		MHz

Switching times

t _{on}	Turn-on time	2SC2834	I _C =5.0A ; V _{CC} =200V I _{B1} =1A , I _{B2} =-1A			1.0	μs		
		2SC2834A				1.2			
t _s	Storage time							2.5	μs
t _f	Fall time	2SC2834						1.0	μs
		2SC2834A						1.2	

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PACKAGE OUTLINE

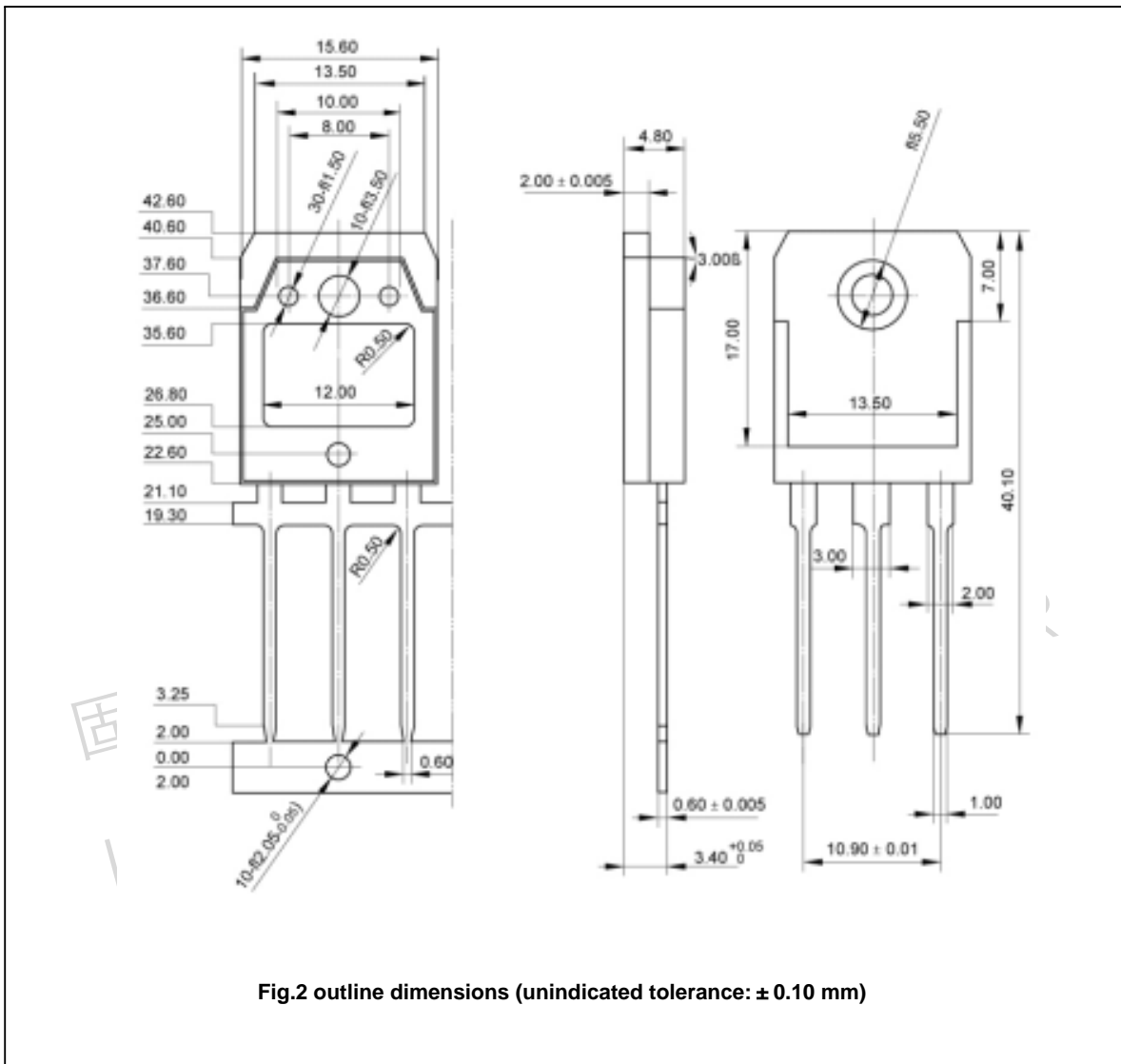


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)