

Silicon NPN Power Transistors

2SC3285

DESCRIPTION

- With TO-3PN package
- High speed switching
- Good linearity of h_{FE}
- High V_{CBO}

APPLICATIONS

- For high speed switching applications

PINNING(see Fig.2)

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

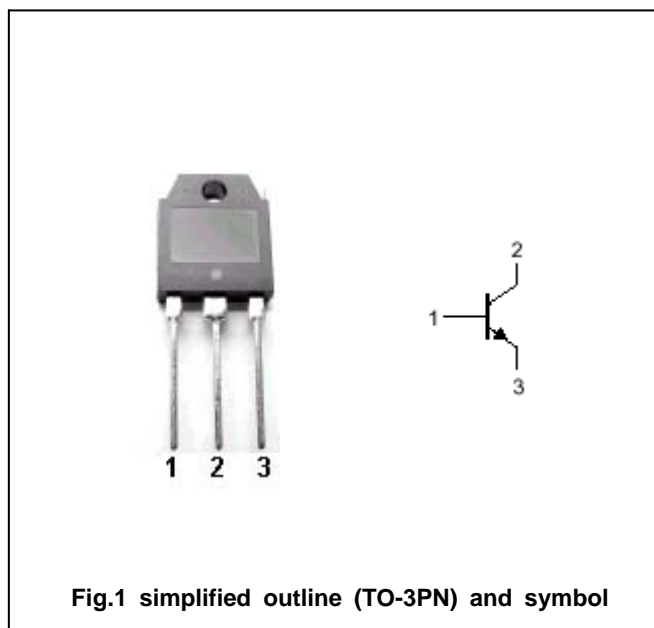


Fig.1 simplified outline (TO-3PN) and symbol

ABSOLUTE MAXIMUM RATINGS($T_C=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1000	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		3	A
I_{CP}	Collector current-peak		6	A
I_B	Base current		2	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	70	W
		$T_a=25^\circ\text{C}$	2.5	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =0.5A ; I _E =0	800			V
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =2A; I _B =0.4A			1.5	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =2A; I _B =0.4A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =1000V; I _E =0			50	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			50	μ A
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V	6			
f _T	Transition frequency	I _C =0.2A ; V _{CE} =5V		4		MHz

Switching times

t _{on}	Turn-on time	I _C =2A; I _{B1} =0.4A; I _{B2} =-0.8A V _{CC} =250V			1.0	μ s
t _s	Storage time				2.5	μ s
t _f	Fall time				0.5	μ s

PACKAGE OUTLINE

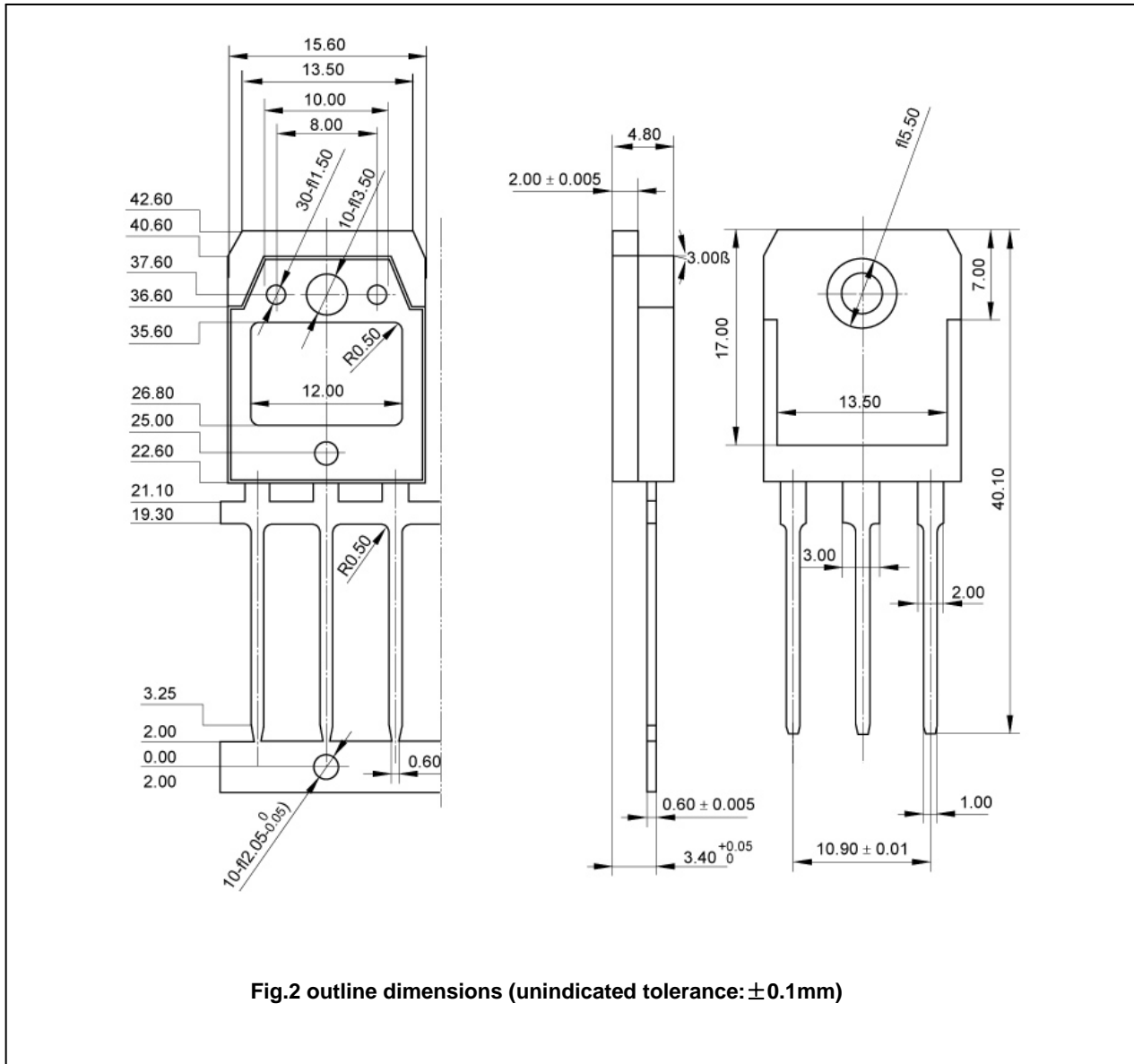


Fig.2 outline dimensions (unindicated tolerance: ± 0.1 mm)