

Silicon NPN Power Transistors

2SC2307

DESCRIPTION

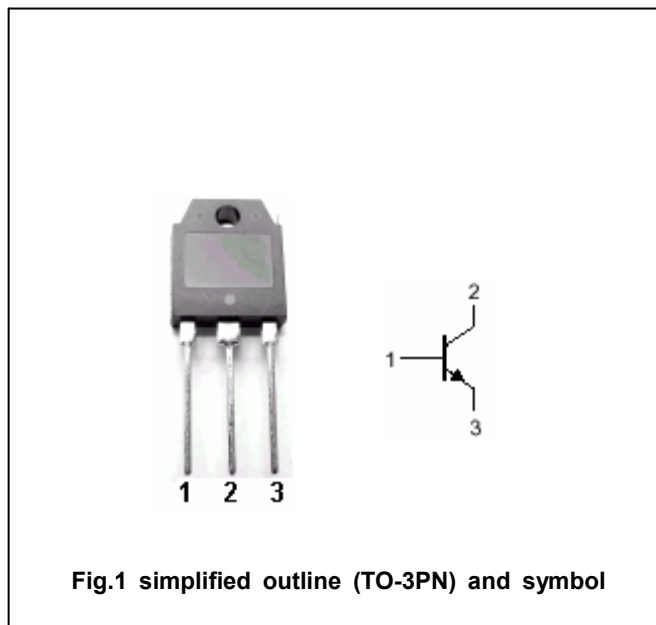
- With TO-3PN package
- High voltage ,high speed

APPLICATIONS

- For power switching applications

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		12	A
P_C	Collector power dissipation	$T_C=25^{\circ}\text{C}$	100	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

Silicon NPN Power Transistors**2SC2307****CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=25mA ; I_B=0$	400			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA ; I_E=0$	500			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=7A ; I_B=1.4A$			0.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=7A ; I_B=1.4A$			1.3	V
I_{CBO}	Collector cut-off current	$V_{CB}=500V ; I_E=0$			100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V ; I_C=0$			100	μA
h_{FE}	DC current gain	$I_C=7A ; V_{CE}=4V$	10			
f_T	Transition frequency	$I_C=1A ; V_{CE}=12V$		18		MHz

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PACKAGE OUTLINE

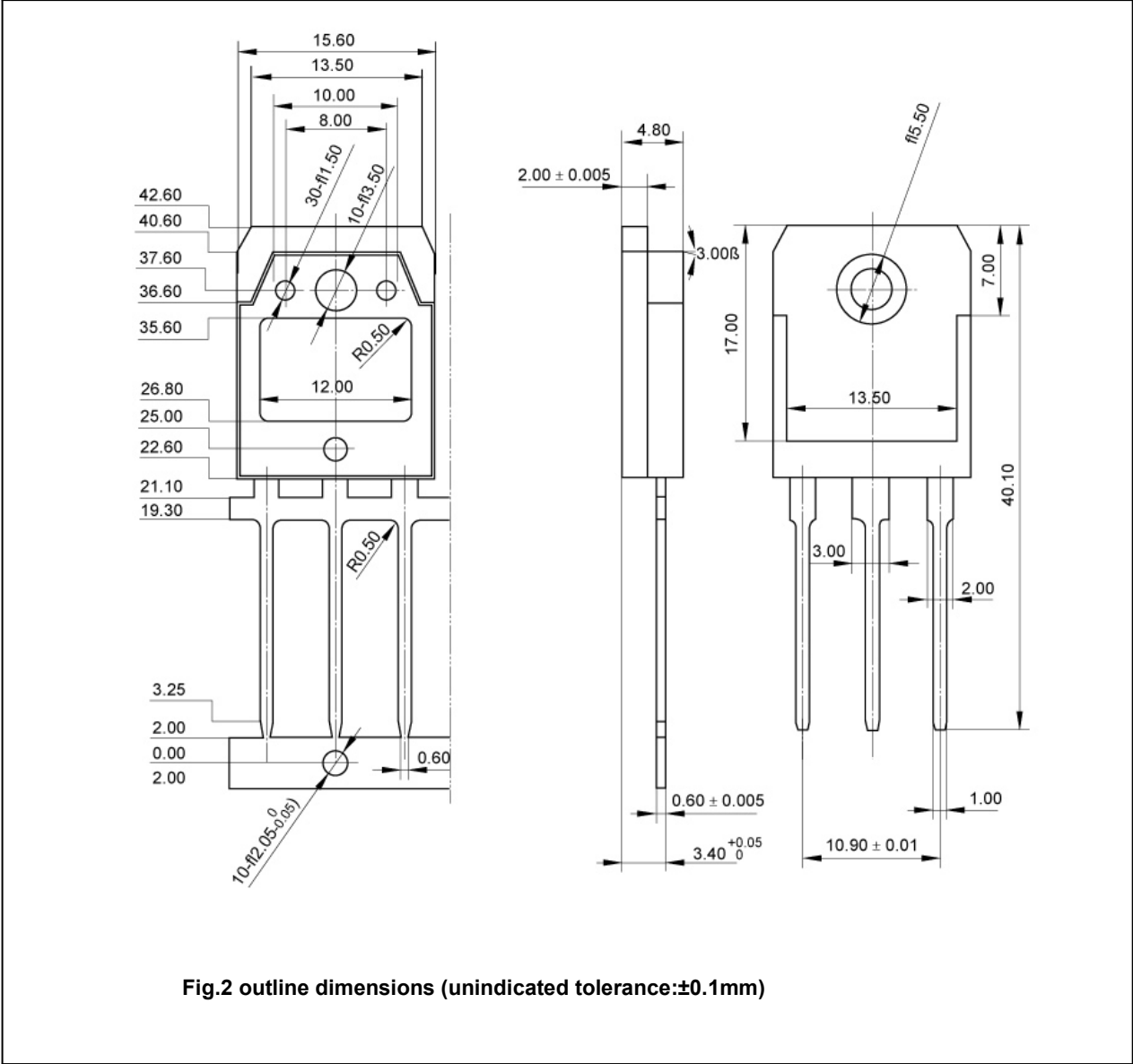


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)