

Silicon PNP Power Transistors

2SA1301

DESCRIPTION

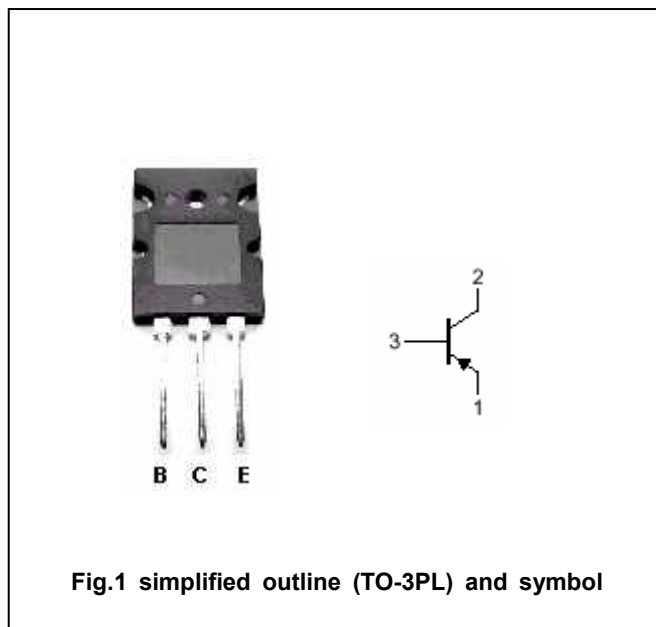
- With TO-3PL package
- Complement to type 2SC3280

APPLICATIONS

- Power amplifier applications
- Recommended for 80W high fidelity audio frequency amplifier output stage

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-160	V
V_{CEO}	Collector-emitter voltage	Open base	-160	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-12	A
I_B	Base current		-1.2	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	120	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -50mA ; I_B = 0$	-160			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -8A ; I_B = -0.8A$		-0.9	-2.5	V
V_{BE}	Base-emitter voltage	$I_C = -6A ; V_{CE} = -5V$		-1.0	-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB} = -160V ; I_E = 0$			-5	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V ; I_C = 0$			-5	μA
h_{FE-1}	DC current gain	$I_C = -1A ; V_{CE} = -5V$	55		160	
h_{FE-2}	DC current gain	$I_C = -6A ; V_{CE} = -5V$	35			
f_T	Transition frequency	$I_C = -1A ; V_{CE} = -5V$		30		MHz
C_{OB}	Collector output capacitance	$f = 1MHz ; V_{CB} = -10V$		480		pF

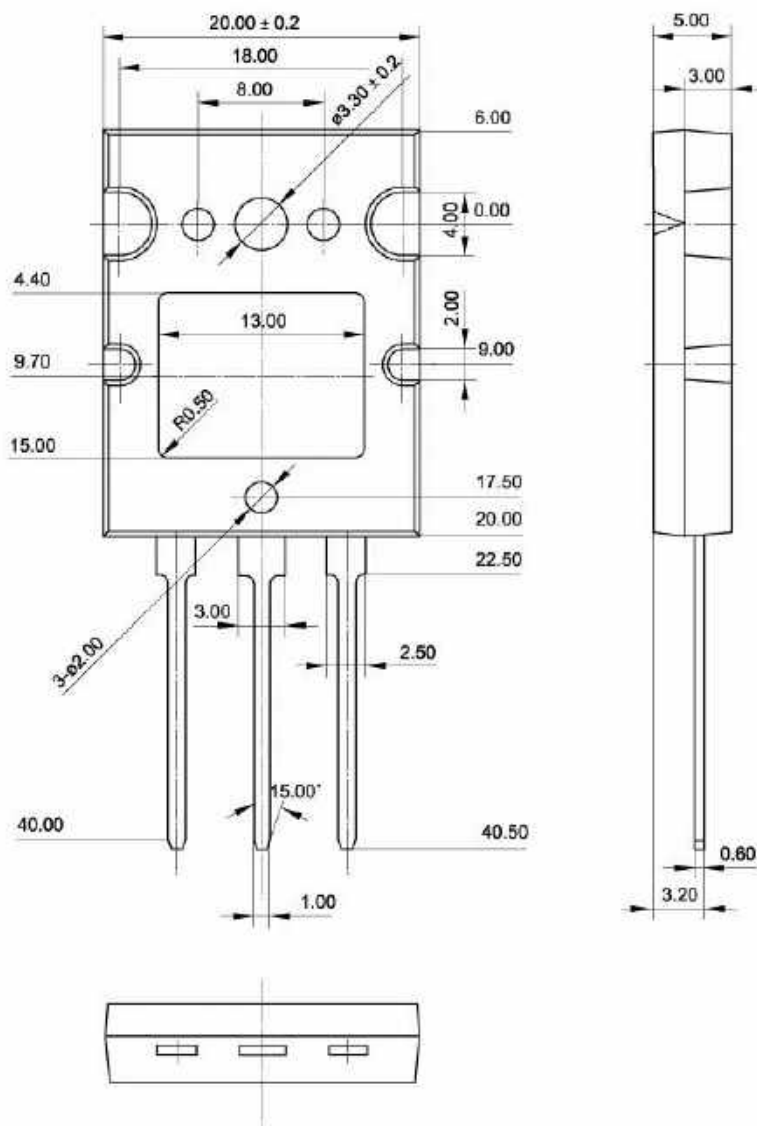
◆ h_{FE-1} classifications

R	O
55-110	80-160

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PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.50 mm)

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