

Silicon PNP Power Transistors

2SB1163

DESCRIPTION

- With TO-3PL package
- Complement to type 2SD1718
- Excellent linearity of h_{FE}
- Wide area of safe operation (ASO)
- High transition frequency f_T

APPLICATIONS

- For high power amplifier applications

PINNING

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

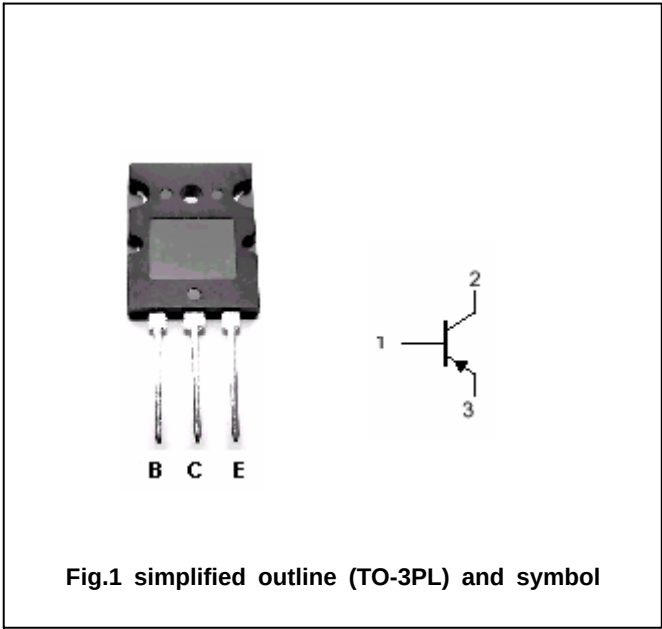


Fig.1 simplified outline (TO-3PL) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-180	V
V_{CEO}	Collector-emitter voltage	Open base	-180	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-15	A
I_{CM}	Collector current-peak		-25	A
P_C	Collector power dissipation		3.5	W
		$T_C=25^{\circ}\text{C}$	150	
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_{CEsat}	Collector-emitter saturation voltage	$I_C=-10A$; $I_B=-1A$			-2.5	V
V_{BE}	Base-emitter on voltage	$I_C=-8A$; $V_{CE}=-5V$			-1.8	V
I_{CBO}	Collector cut-off current	$V_{CB}=-180V$; $I_E=0$			-50	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-3V$; $I_C=0$			-50	μA
h_{FE-1}	DC current gain	$I_C=-20mA$; $V_{CE}=-5V$	20			
h_{FE-2}	DC current gain	$I_C=-1A$; $V_{CE}=-5V$	60		200	
h_{FE-3}	DC current gain	$I_C=-8A$; $V_{CE}=-5V$	20			
f_T	Transition frequency	$I_C=-0.5A$; $V_{CE}=-5V$		20		MHz
C_{OB}	Collector output capacitance	$f=1MHz$; $V_{CB}=-10V$		230		pF

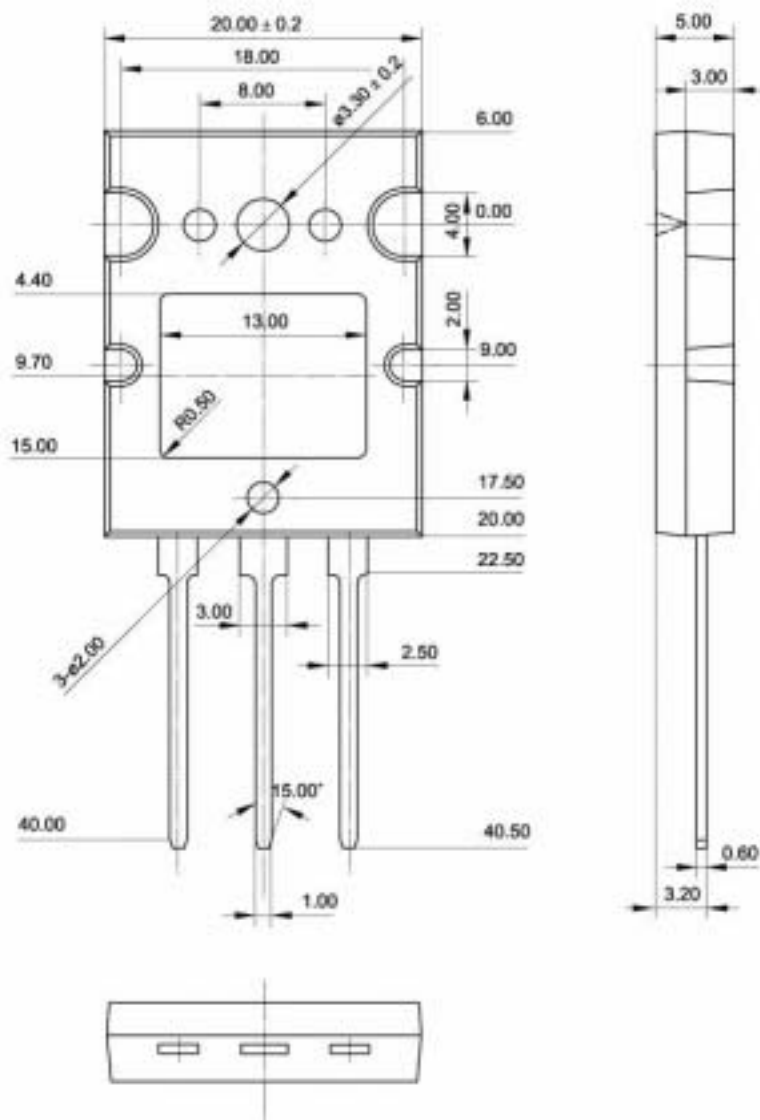
◆ h_{FE-2} classifications

Q	S	P
60-100	80-160	100-200

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PACKAGE OUTLINE

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