

Silicon NPN Power Transistors

2SD1718

DESCRIPTION

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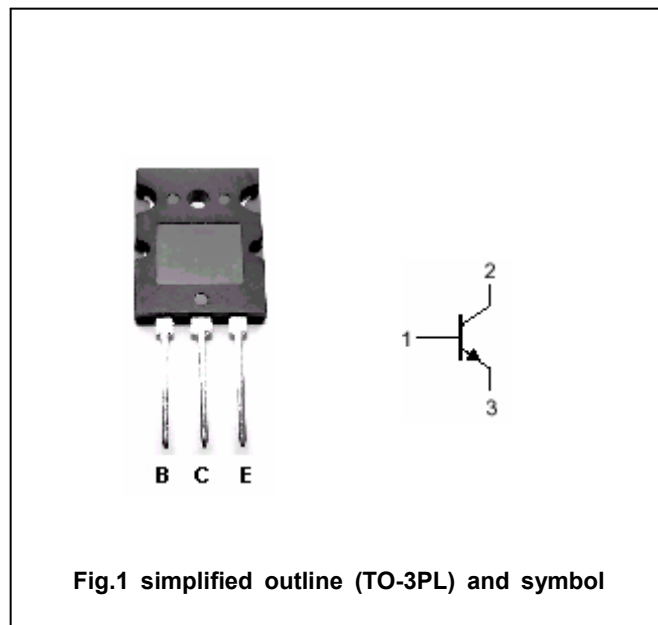
- With TO-3PL package
- Complement to type 2SB1163
- Excellent linearity of h_{FE}
- Wide area of safe operation (ASO)
- High transition frequency f_T

APPLICATIONS

- For high power amplifier applications

PINNING

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

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

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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 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

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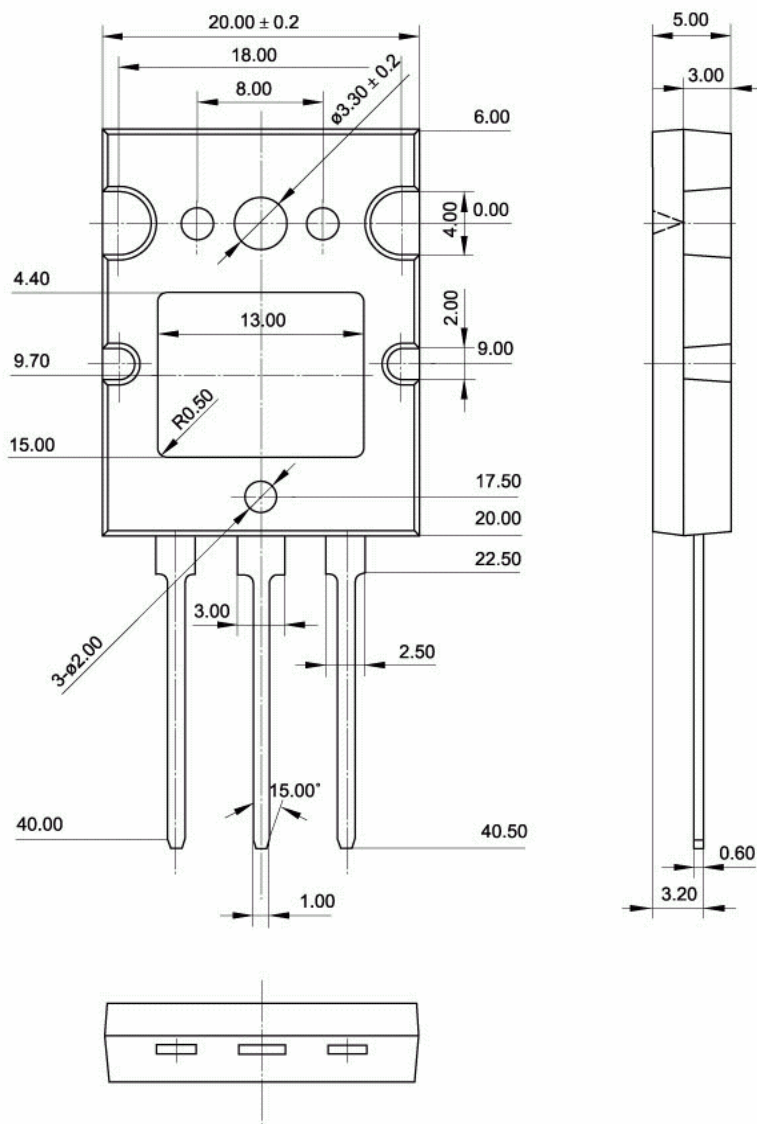


Fig.2 Outline dimensions (unindicated tolerance:±0.50 mm)